IP Kamera 9070IR-PoE

User Manual

Release Date: 06/20/2011
Firmware Version: V1.2.1.9

Warning: Any changes made to this equipment without permission may cause damages to the device!

IMPORTANT NOTICE

1. IP Kamera 9070IR-PoE was designed for outdoor / indoor.
2. Please use the power adapter provided by the dealer, the manufacturer is not responsibility for the possible damage from using power adapters.
4. Do not shake the IP Kamera 9070IR-PoE in any fashion
5. Please contact the dealer If IP Kamera 9070IR-PoE is not working properly.

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1.) Welcome

Introduction

Aviosys 9070IR is a great solution to add for HD IP surveillance. With resolution up to 1280 x 720P, motion detection, email notification, RSTP broadcasting, RSS notification, scheduler recording , infrared night vision and Aviosys features like My Web & EZ blog, your IP camera experience will be breathtaking. Furthermore with Aviosys products you get wonderful quality products at very economical prices. Try out the 9070IR for yourself and see how you like this device.

Minimum System Requirements

CPU Minimum Requirements

- Intel(R), Pentium(R), DUAL Core (D),CPU 3.0GHz or equivalent
- Operating Systems: WINDOWS Operating Systems (IE5.0+SPI)
- 512 MB system memory or above
- Video Card: 3D hardware accelerator card required – 100% DirectX 9.0c compatible
- 10/100 Ethernet switch/hub
- Sound Card: DirectX 9.0c compatible sound card
- Ethernet network port/card
- Network cable
- Internet (For remote access) or Ethernet Network (Internal Network use)

Software

- VLC media player 0.8.6b or above.
- Windows XP Service Pack 2 or above.

2.) Product Overview

Features

1. Tri-Mode Camera (MPG4-1/MPEG4-2/M-Jpeg)
2. Advance Motion detection trigger AVI /Jpeg save on FTP / SD card or Email
3. 3 layers (Admin, Operator, and User) Password protected
4. Resolution from CIF 352x192 up to HD 1280x720P
5. Supports NTP protocol to get correct time schedule.
6. 1/2.5" Advance CMOS sensor, with highly sensibility for quick response insufficient lighting.
7. Infrared for Indoor / Outdoor use
8. Water Resistant Design
9. Supports HTTP CGI command set. Easy for system integration
10. IP Service Search utility, to find the IP Kamera on internet with ease
11. Adjustable frame-rate, bit-rate, rate-control type, quality factor for best image quality and speed.
12. Supports date and time marking on the captured video, and also inserted streamed data.
13. Measured End-to-End latency is less than 150ms
14. Supports adjustable backlight, brightness, contrast, saturation & sharpness
15. TV Output capabilities
16. Automatic alarm recording buffer
17. CNT Technology – Just Plug and Play no need to port forward
18. EPTZ – Electronic Pan, Tilt, and Zoom
19. 2BG SD Memory Storage – Add convenience and storage
20. Scheduler recording capabilities
21. Email Capabilities (Supports Gmail, Yahoo, & Hotmail)
22. Alarm Recording Buffer
23. Supports: HTTP Web Server (HTTP), SSL, FTP client, SMTP client, NTP client, DHCP client, UPnP client, RTSP over UDP, RTP
24. RSS Notification
25. Net drive Capabilities - For storage to local network computer
26. Time Stamp and OSD features

Specification

Casing: Reinforced Aluminum
Case Color: Midnight Grey
Weight with outer case: 743.0 g
Dimensions (W x L x H): 8.5cm x 13cm x 10cm
Dimensions with outer case (W x L x H): 8.6cm x 17.5cm x11cm
Operating Conditions: Temperature: 0-80°C Humidity 20 – 80% RH
Power: AC Adaptor Input: 100-250Vac /47-63Hz,
Output: 12Vdc/1A Max: 12W

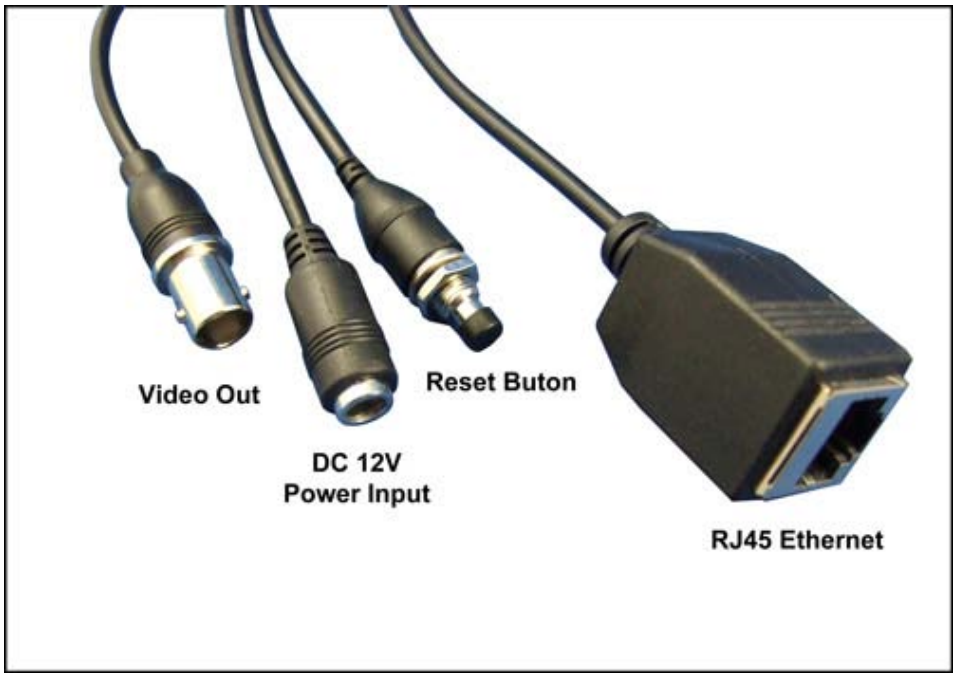
Package Contents

- ☐ **9070IR-PoE Unit x 1 with sun cover**
- ☐ **9070IR-PoE Installation CD**
- ☐ **AC Adaptor x 1**
- ☐ **Camera Mounting Bracket x 1**

3.) Hardware Description

Cable Description

Cables:



DC 12 V Power Input:	Plugs in the Power Adapter to the DC 12V Card
RJ45 Ethernet:	Plug in the RJ45 Ethernet cable to the Ethernet Support standard **PoE** 802.3af
Reset Button:	**Reset to Manufacturer Default:** Hold Reset button for 5-10 Seconds and the device will reset to manufacturer default.
Video Out:	The Video out requires a BNC connector to output video to a different source.

4.) Setting up the device

Hardware setup

Setting up the device

*Before setup the device make sure of the following:

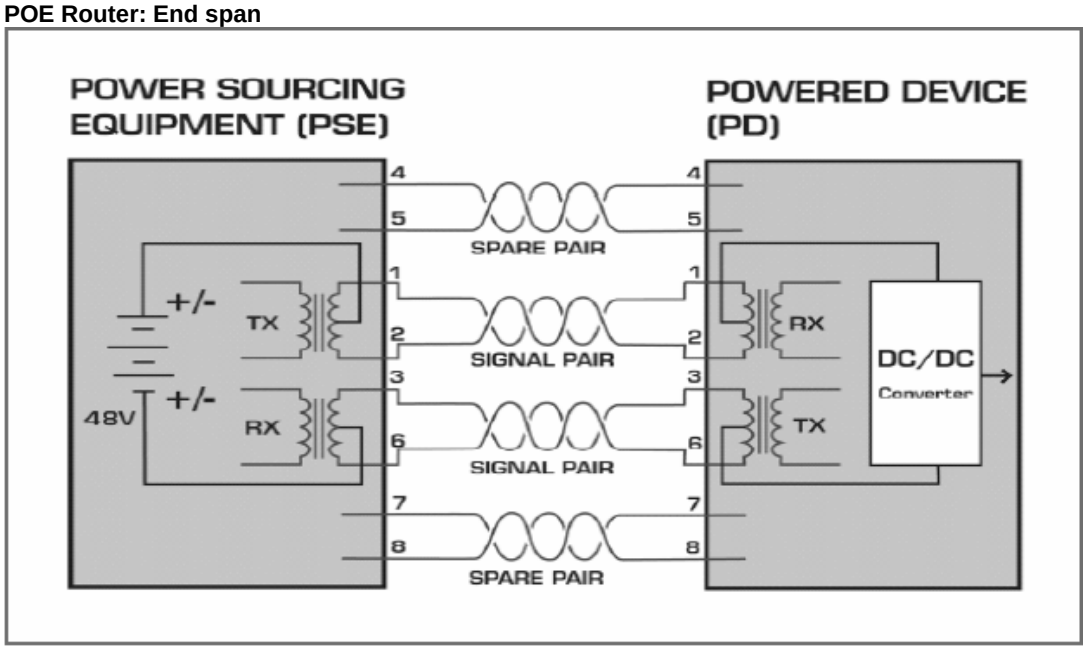
1.) Make sure that all the package contents are all included
if anything is missing please contact the store or your distributor.
2.) Make sure the power adaptor is the correct specification.
3.) Make sure that all the cables are working correctly

PoE Router Type

To use the 9070IR-PoE, the correct PoE router standard must be used. The type of PoE router that must be used will have to be designed so that power can be sourced from the PSE through the data lines via data transformer center taps.

Please see the image below for reference.

POE Router: End span



* End Span : Power can be sourced from the PSE through the data lines via data transformer center taps.
(Tap the unused wire pairs 1/2and 3/6 to carry power)

Internet Accessible Setup

The internet connection can be setup in two main ways so that the 9070IR-PoE can be accessed through the internet

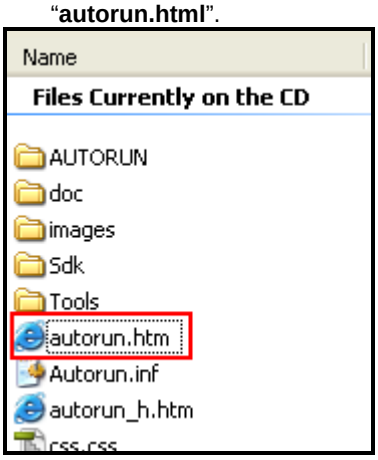
Connecting the Device

1.) Connect the IP Kamera 9070 to a HUB or Router with a RJ45 network cable.
2.) Connect the HUB or Router to the internet (May through ADSL/XDSL modem).
3.) Connect the power adapter to the DC 5V port of IP Kamera 9070.

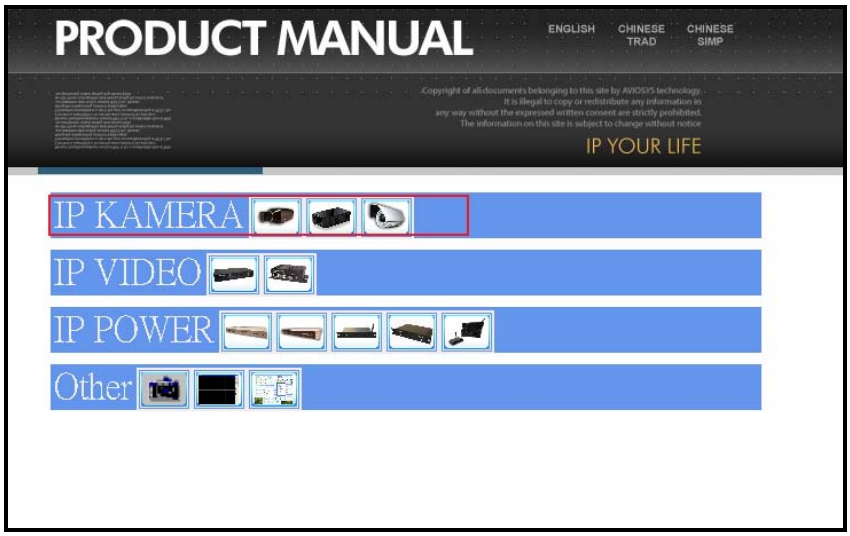
Software Setup

Software

1.) First place the **Media Link-IP Family CD** that came with your device into your CD/DVD Rom drive. The CD should auto run but if it does not go to the CD/DVD Rom drive and select the file "**autorun.html**".



2.) Select the IP Kamera section and pick the IP Kamera and Model that you are using.



3.) Download the following software and save them to the appropriate locations.

   a. **IP Edit** - Device search tool which allows you to modify IP settings, find your on the local network and IP Service.

   b. **Surf 16 CH –** 16 Channel DVR, Monitoring, & Recording Software. Views up to 16 channels on one screen.

   c. **Surf Pop –** Surf Pop is a new interactive IP Kamera monitoring software

4.) Once installation is complete please double click the **IP Edit** to configure and search for your device.

Installing VLC Codec

The files that are recorded by the 9070 IR requires this codec so that you are able to view the view. Download the latest version of the VLC codec and install it into your computer. You can find the latest version of the codec from here
http://www.videolan.org/

IP Edit

IP Edit is a tool designed to search for Aviosys products that are on the network. With this tool you can edit some specified fields which allow the device to be found and accessed.

IP Service allows users to find their device on the internet without having to remember long IP Addresses. With IP Service all you need to simply remember the name of your device and search for it on IP Service.

For example, you can type “Jerry’s IP Cam and IP service will do the rest. It also acts like a DYNDNS server in that if you have a dynamic IP Address IP service will continually update the new IP.

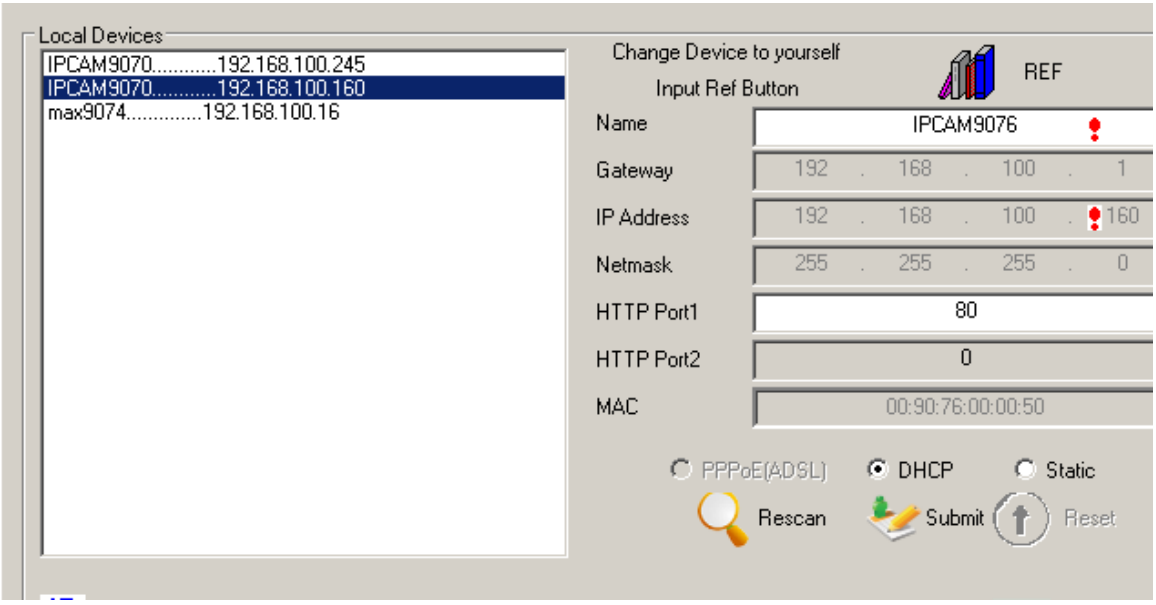
Easy Setup (DHCP activated)

1.) Check that the hardware has been properly connected and powered on.
Note: Please allow the IP Kamera 9070IR to load before using IP Edit.

2.) Double click the IP Edit icon to start the program. The 9070IR will automatically receive an IP Address from the DHCP server or Router. You will automatically find the device under the local device section of IP Edit

If no DHCP server is available you must manually set the IP address to match your networks settings. Please see the custom setup page below more details on how to manually set your device.

3.) Simply double click on your device in the local device section and a internet explorer window will appear, and start connecting to your device.



All devices will need to be on the same network if not the device cannot be accessed and will not be detected.

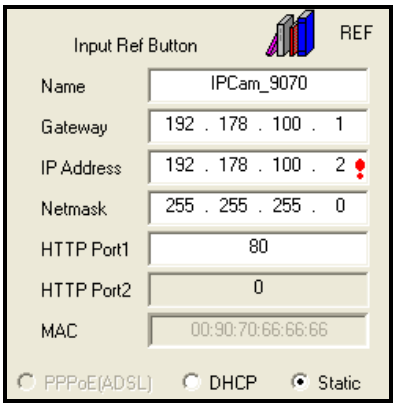
Custom Setup (Manual Setup)

When no DHCP is found on the device, the 9070IR will be given a static IP Address.

Default IP: 192.168.1.168 (When 9070IR is connected to PC directly)
Default Login: admin
Default Password: 12345678

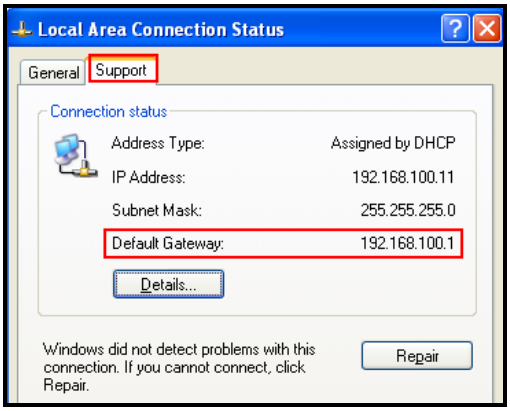
1.) Highlight the 9070IR device in the local devices section of IP Edit. On the right side of IP Edit all network information of the device will be displayed.

If the device is not on the same network a Red Exclamation mark will appear in the IP Network information section



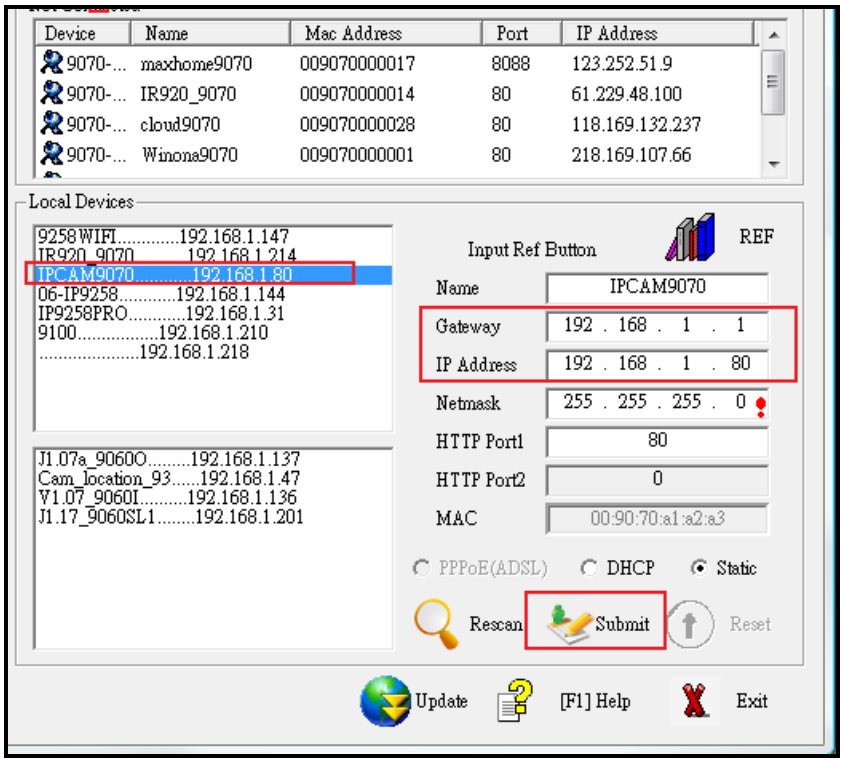
2.) To setup the device, you will need type in the correct **Gateway** and **IP Address**.

The Gateway Address: The gateway address can be obtained in Windows under the network connections page



IP Address: Make sure the first 3 sections of the IP Address matches the gateway address.
Example: Gateway Address – 192.168.1.1 IP Address – 192.168.1.xxx

3.) Once the Default Gateway information has been obtained, enter the correct information into IP Edit and hit the submit button.



4.) Then hit the rescan button on IP Edit to confirm the changes have been made.

IP Service

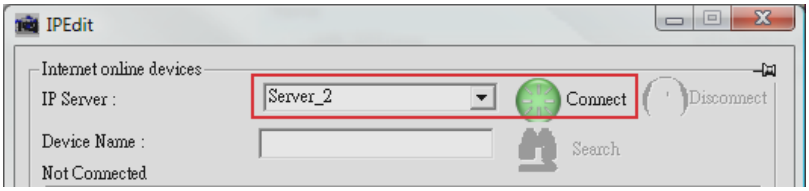
Using IP Service

How to use IP Service on IP Edit:

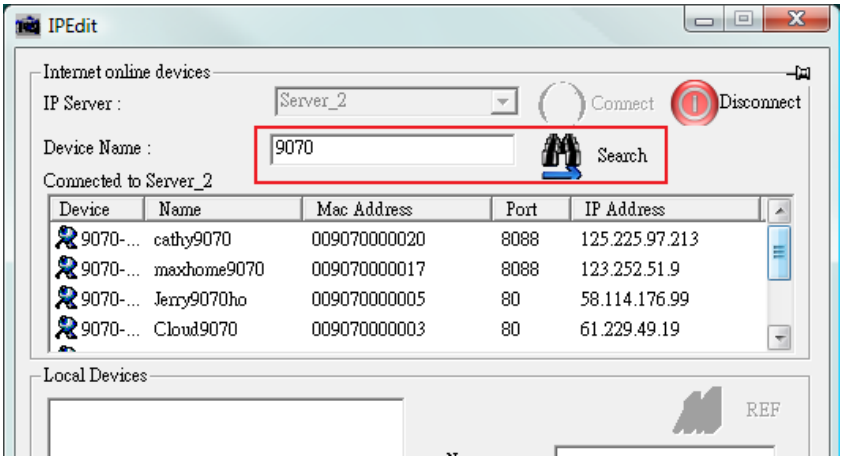
IP service allows the user to directly connect to his / her device through the internet without having to remember long confusing IP Address. Instead you only need to remember the name of the device that the you have selected. Then the user can connect to IP Service, type in the device name, and connect directly to the device.

Note: The IP Kamera 9070IR requires you to select Server 2 on IP Service

Open IP Edit , the device will show up in the Local Device Section. If you have not selected a name for the device, please refer to the section on the manual labeled: “Naming your device”.
To start IP Service, **Hit the green connect button on the top of IP Edit .**



3.) Once you have been connected search for your device by typing in at least the first 3 letters that you named your device with. Then hit the search button.



4.) Double click on your device and an Internet Explorer window will appear connecting directly to your device.

Note: It is crucial to have the IP Address of the device port forwarded from the router that you are using so you can connect to your device from anywhere. Please refer to your routers user manual on how to port forward your device.

www.myipedit.com

www.myipedit.com is a new feature that allows Aviosys users to easily find there device on the internet . Simply by typing in the name of your device you will not have to remember long IP addresses to get to your device.

Start by going to www.myipedit.com
Here you will be able to select from 2 methods of IP Service
1.) IP Service through Aviosys servers

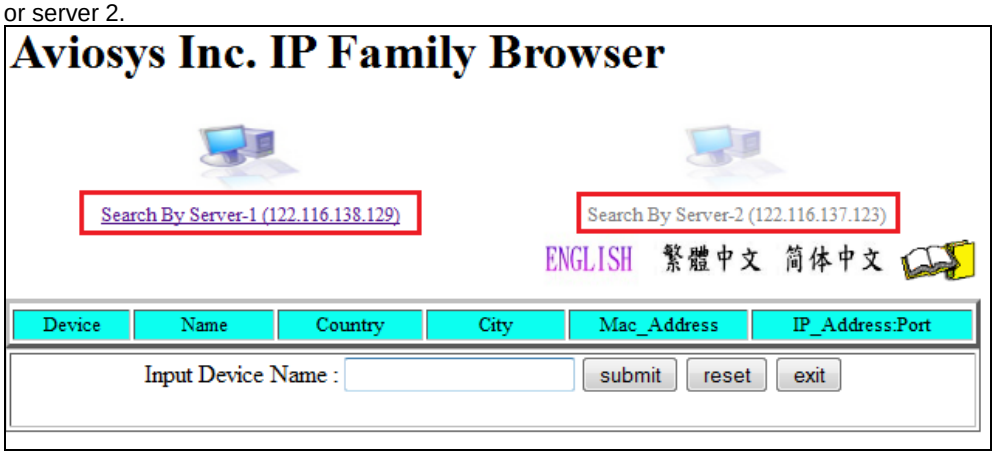
2.) IP Service through Google cloud

Note: Make sure that the enable IP Service feature is turned on under the network settings of your device.

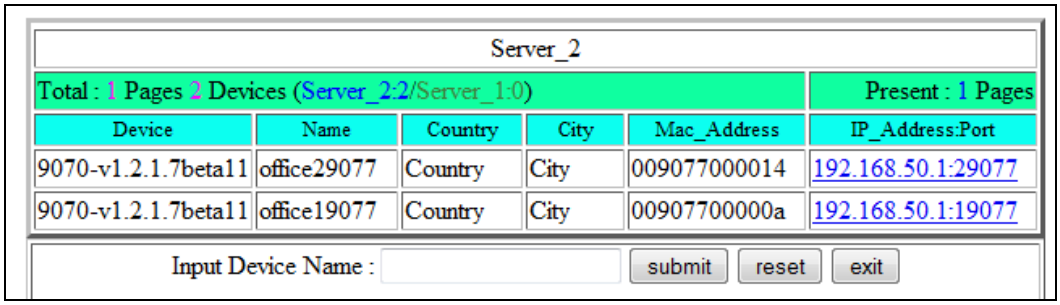
Searching with IP Service:

To use IP Service:
1.) Click on the image and you will be taken to the IP Service webpage.

2.) Depending on which server you selected in the IP Service settings, you will need to select from server 1 or server 2.



3.) Type in the name that you have selected for your device and hit the submit button.
Note: You can name your device in the network settings of your device under IP Service.



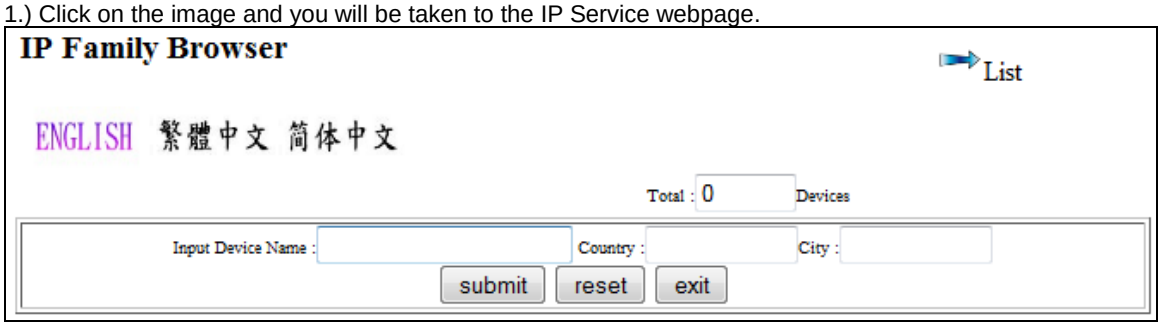
4.) Then you can click on the IP Address of the device to connect to it. Keep in mind that the device needs to be port forwarded to be able to access it.

Searching with IP Service (Google Cloud):

IP Service (Cloud)

To use IP Service (Cloud):

1.) Click on the image and you will be taken to the IP Service webpage.



2.) Type in the name that you have selected for your device and hit the submit button.
Note: You can name your device in the network settings of your device under IP Service.

3.) Simply put your mouse over the picture of your device and if you have selected your location it will show on the map in the left. Then click on the Icon to connect to your device. Keep in mind that the device needs to be port forwarded to be able to access it.

5.) Accessing the device on the Internet (Port Forwarding

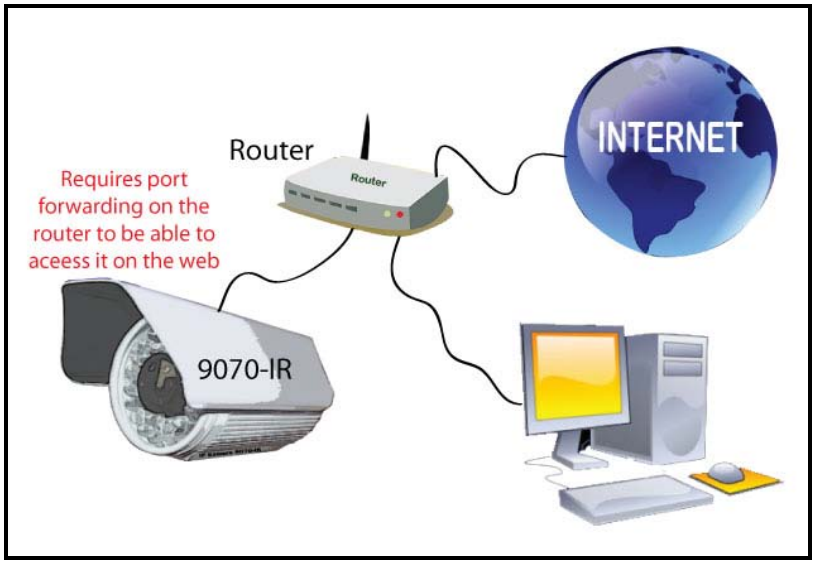
Router / Firewall Setup

Using a Router/Firewall to connect each device to the internet

Note: The device needs to be port forwarded on the router so that it can be accessed by the internet.

For example
9070IR-PoE IP Address: 192.168.1.882
9070IR-PoE Port: 9070

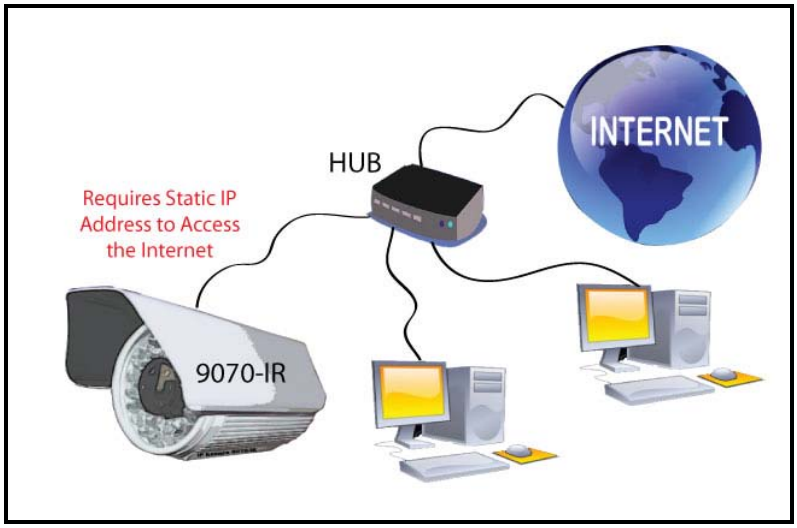
On the router that is being used port forwarded (port triggered) IP Address 192.168.1.882 and port 9070. For this section you may be required to refer the user manual for the router due to the fact that each router has a different way of setting up the device.



Note: *Please refer to page: 43 on how to use CNT (Cross Network Technology). With CNT no port forwarding is required to view the camera. But for normal functionality please use the web browser to view the camera.*

Static IP Setup

Static IP Address provided by the ISP.



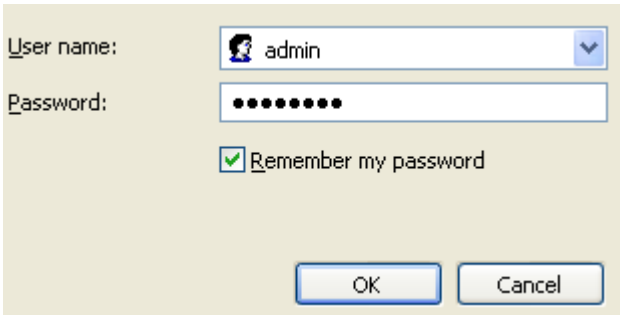
In this case, the 9070IR-PoE is being connected to the internet through a hub, which is different from a router. The hub does not provide DHCP, and therefore would require that this setup have a static IP Address that is provided by the ISP.

Contact the ISP to find out the static IP address so that your device can be accessed through the internet. Once a Static IP has been assigned the device will be able to automatically go onto the internet.

6.) Web Interface

Connecting to the 9070IR-PoE

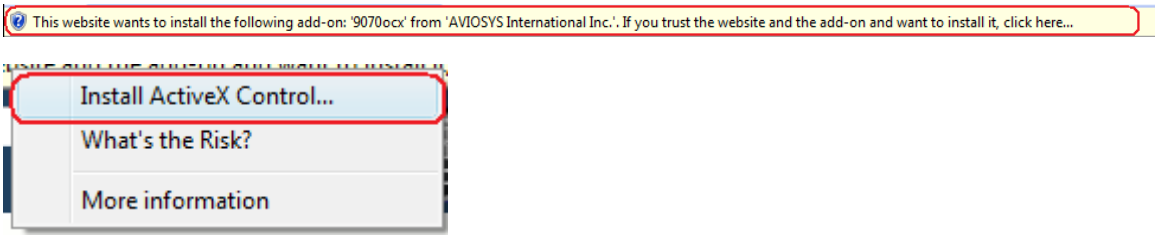
Once the 9070IR-PoE has been setup correctly, connect to the login page.
An Internet Explorer browser screen pop up with the login screen.



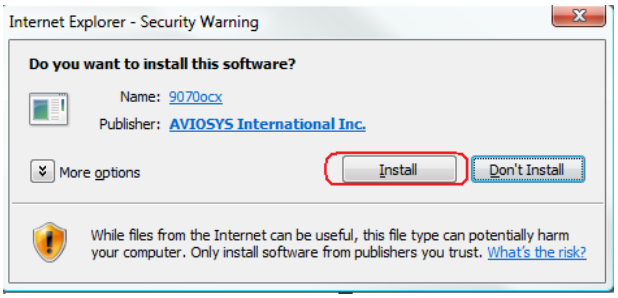
Default IP: 192.168.1.168 (When 9070 is connected to PC directly)
Default Login: Admin
Default Password: 12345678

1.) Once you have logged into the device you will be required to install active x controls.

2.) Right click on yellow bar and install the activeX controls.

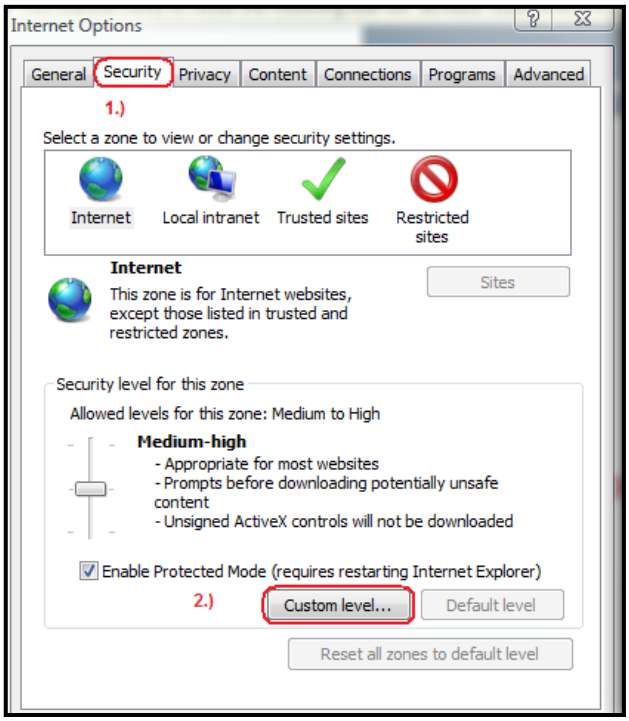

This website wants to install the following add-on: '9070ocx' from 'AVIOSYS International Inc.'. If you trust the website and the add-on and want to install it, click here...
Install ActiveX Control...
What's the Risk?
More information

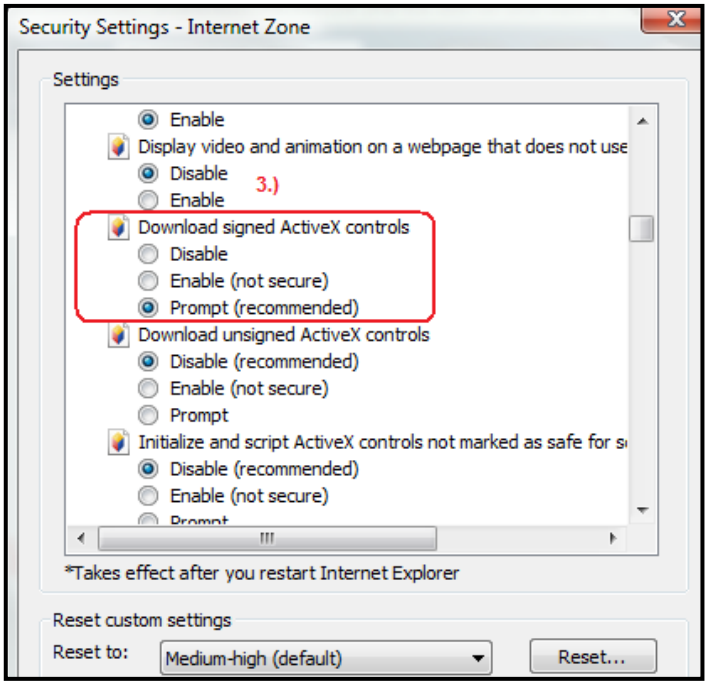
3.) Then click the install button and install the active X controls.


Internet Explorer - Security Warning
Do you want to install this software?
Name: 9070ocx
Publisher: AVIOSYS International Inc.
More options
Install
Don't Install
While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?

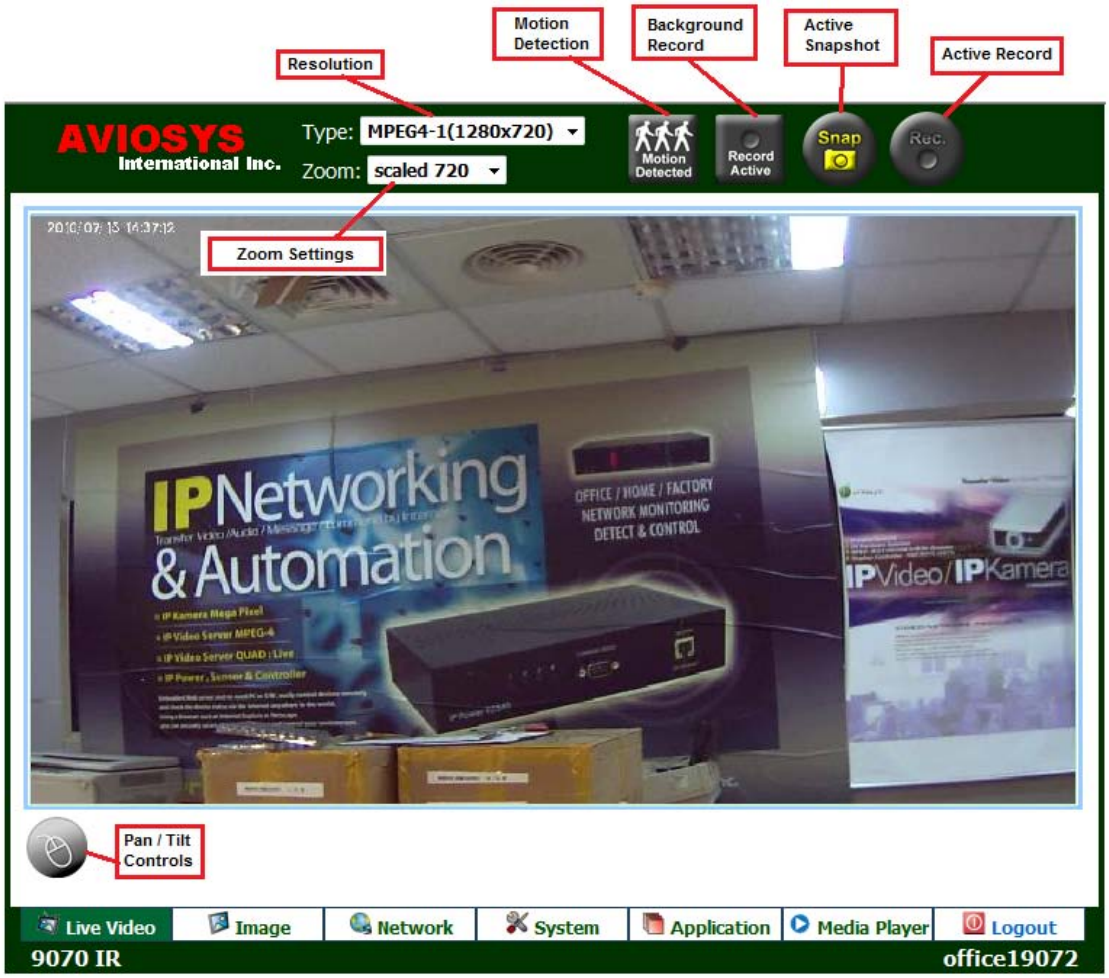
4.) Once active X controls have been installed the video feed will show on the screen

Note: If no active x controls are showing up, please go to internet explorer and enable activeX controls.





The Control Console



The IP Kamera 9070IR-PoE Control Console starts in the Live Video *Section of the webpage. In this section navigate to the other options and settings of the 9070IR-PoE*

Live Video

***Live Video**: The Live Video section allows the user to view the camera, change resolution views,*

Image

***Image**: The Image section allows the user to adjust the image settings, including recording / viewing codec, frame rate, image tuning, brightness, contrast, saturation, and etc.*

Network

***Network**: The network section allows the user to change the devices network settings, ftp settings, smtp (email) settings, sntp settings, and IP service settings.*

System

***System**: The system section allows the user to change the devices date and time, set time stamp for video, users, audio settings, update, and event log.*

Application

***Application**: The application section allows the user to change the video recording format, ftp storage settings, SD Card settings,*

Media Player: The Media player can directly access the files in the built in memory. Each video file & picture can be accessed here and streamed through the internet.

Logout: For security concern. User need to type username and password after log out . It can protect form other user to view by same browser of PC.

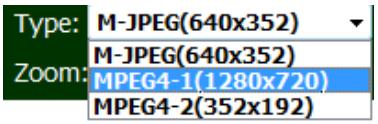
Live Video

The Live video section of the IP Kamera 9070IR-PoE is where the user can view the video of the device. From here resolution, record onto current pc, take a snapshot, zoom, and detect motion detection settings can be changed.

Type and Zoom

Type:

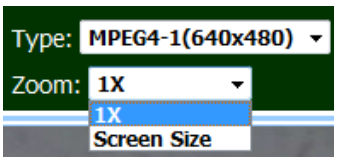
The type function allows you to set the streaming format for the IP Kamera 9070. You can select from the following type of resolutions depending on the format type you have set in the image settings.

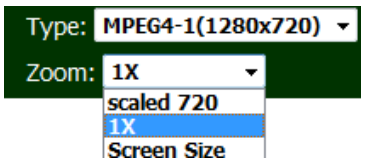


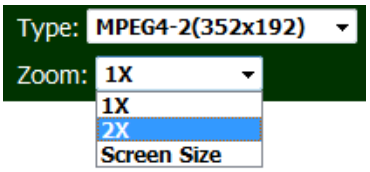
M-JPEG (640x 352)
MPEG4-1 (1280x720)
MPEG4-2 (352x192)

Zoom:

The zoom function allows you to select the screen size of the stream. Depending on the type that you have selected there will be different zooms that will be available.







1X zoom: The 1X zoom is the normal view for each type.

2X zoom: This 2X zoom is 2 times the normal view for that type.

Scaled 720: Is a resolution only available in MPEG-4-1, which sets the picture at 720P.

Screen Size: Will enlarge the image to the whole size of the screen. This function is very useful when trying to display on larger monitors.

Motion Detection

Motion Detection: *The motion detection icon will display when motion has been detected. This setting must be activated in the application section*

Motion Inactive - When motion detection is inactive

Motion Activated - When motion detection is activated, the icon will turn blue

Active Record

Active Record: Active record will show up when the device is actively recording. Active recording functions like motion detection, scheduler, or an alarm will set off this automatic recording.

Active Record Inactive - When active recording is not activated it will look like the picture below

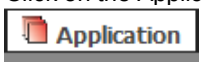
Active Record Activated - When the active recording function is activated it will light up in red.

Snapshot

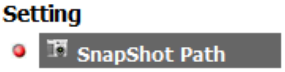
Snapshot: The snapshot function, creates a easy way take pictures of the current view in the IP Kamera 9070IRIR.

To setup the snapshot destination folder:

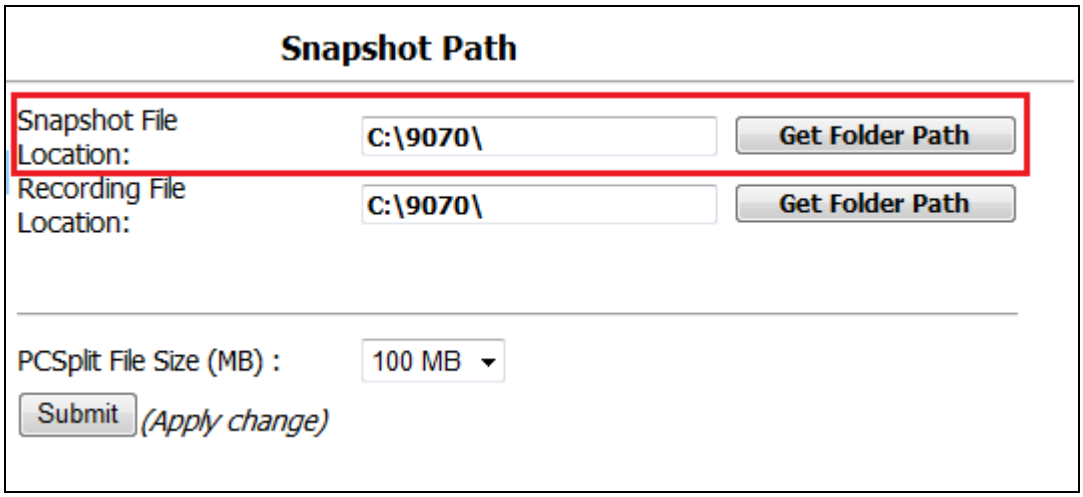
1.) Click on the Application link on the bottom menu



2.) Then select Snapshot path



3.) In here browse for the location where snapshot pictures will be stored. By default the snapshot path will be in C:\9070IR\



To use the snapshot function:

1.) Click on the snapshot button, and you will see the screen flicker black.

2.) In explorer go to the selected path and the files will be created there.

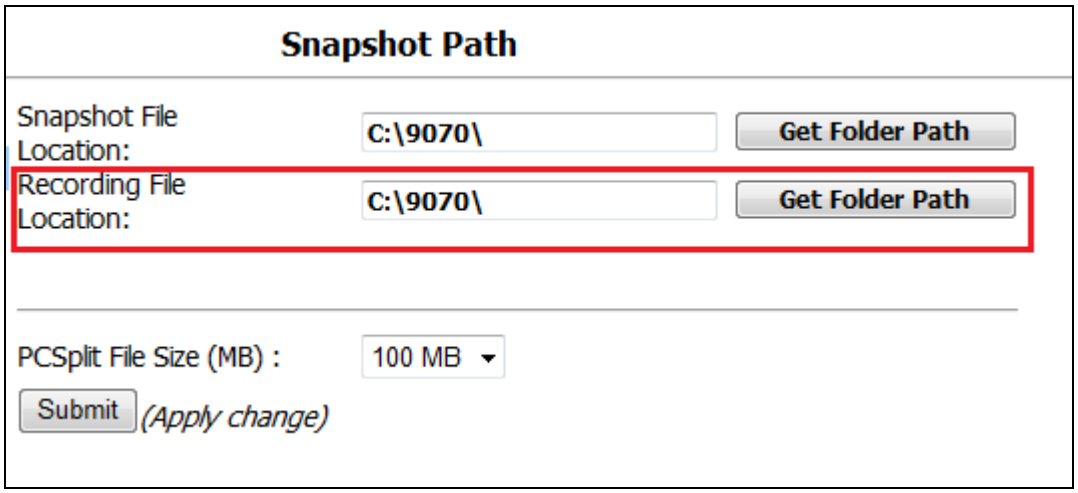
Record

Record: The record button on the 9070IR when pressed will record the live video feed and save the video into the computer viewing.

To record follow the following steps:

1.) Select the recording path that you would like to store the file under in the

under snapshot path.



2.) Click on the record button to start recording

3.) Once the folder has been selected the device will start to record.

To stop recording click on the red icon and it will return to the original state.

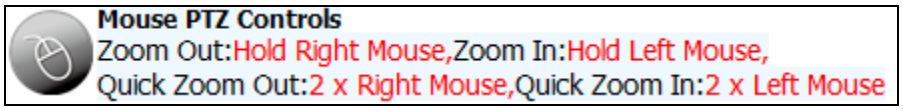
Note: Remember you need VLC codec to play the video files that are recorded

Mouse EPTZ

Mouse EPTZ

On the live video screen move the mouse cursor to the video and click left or right click to use the Mouse ETPZ functionality. Here you can easily **Zoom in, Zoom Out, Quick Zoom, Quick Zoom Out**.

The instructions will be displayed on the screen when the mouse if moved over the icon.


Mouse PTZ Controls
Zoom Out:Hold Right Mouse,Zoom In:Hold Left Mouse,
Quick Zoom Out:2 x Right Mouse,Quick Zoom In:2 x Left Mouse

To Zoom In: To Zoom into the picture move the mouse cursor over the picture and click and hold the left mouse.

To Zoom Out: To Zoom out of the picture move the mouse cursor over the picture and click and hold the right mouse.

Quick Zoom In: Quick zoom in is used to quickly zoom into the maximum zoom of the picture. To use this function on the picture double click the left mouse.

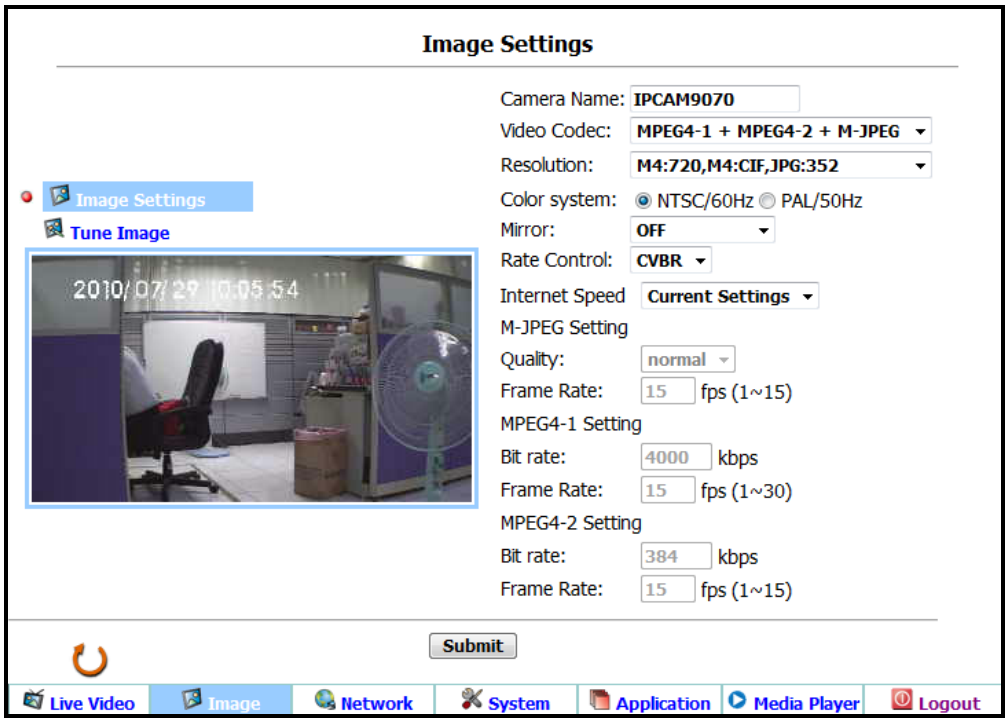
Quick Zoom Out: Quick zoom out is used to quickly zoom into the maximum zoom of the picture. To use this function on the picture double click the right mouse.

Image

The image section changes the Image settings for the device and tunes the image of the IP Kamera 9070IR-PoE

Image Settings

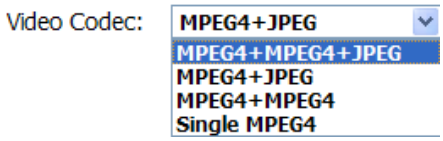
The Image settings section allows you to change the video settings and the Name of the Kamera.



Camera Name:

Select a camera name for the device and then hit submit

Video Codec:



Resolution:

Resolution	
(MPEG4+MPEG4+JPEG)*:*	*M4:720P,M4:CIF,JPG:352*
(MPEG4+JPEG)*:*	*M4:VGA,JPEG:VGA* *M4:720P, JPG:720*
(MPEG4+JPEG)*:*	*M4:720,JPEG:352*
(MPEG4-1+MPEG4-2) ***Not supported in Firefox****:*	*M4:720,M4:CIF*
(Single MPEG4)*:*	*M4:720*

Color System:

Select the broadcasting color system that pertains to your country.

NTSC/60Hz
PAL/50Hz

Each country has their TV broadcasting standard, please check with your local service provider to find out if you us a NSTC system or PAL system.

Mirror:

The mirror function allows you to flip the image of the device around. Depending the direction and the way the camera is mount you can use this setting to change the angle of the picture. Please see below for more details.

Normal View:

Normal View	***Horizontal View***	***Vertical***	***Both***

Rate Control:

Select the Bit Rate Control that fits your needs.
CVBR: Constrained Variable Bit Rate
CBR: Constant Bit Rate

Internet Speed:

The Internet Speeds settings allows you to choose some preset settings to best fit your current internet speeds. From here you can select from the following options:

Cable / ADSL: *Most high speed internet users today use Cable / ADSL as the main internet provider line.*
Fiber Optics: *High speed fiber optics provides the best solution for outside the network because it is very fast.*
Intranet (LAN): *When using the IP Kamera from within the network this is the best option.*
Custom: *This setting allows you to manually input a setting for the Bit Rate, FPS, and picture quality.*

M-JPEG Settings: *The available Quality settings and FPS for the M-JPEG settings are shown below*

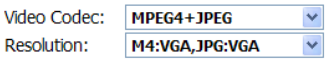
M-JPEG Quality Settings
High
Medium
Low

M-JPEG Frame Rate Settings
30 FPS
15 FPS
7.5 FPS
3 FPS
1 FPS

MPEG4-1
Bit Rate: *Select a value from 64~8000.*
FPS: *Select a FPS from 30fps, 15fps, or 7.5fps*

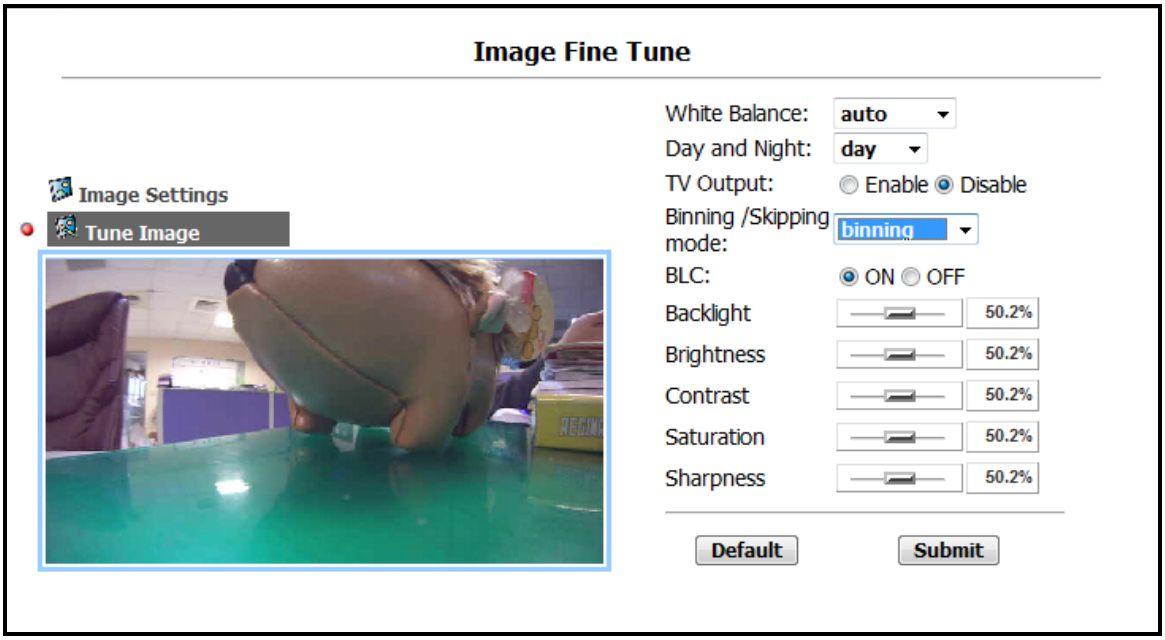
MPEG4-2
Bit Rate: *Select a value from 64~8000.*
FPS: *Select a FPS from 15fps or 7.5fps*

Note: PTZ is only available in the mode below. When you enable PTZ it will automatically jump into that mode.

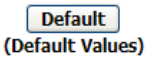


Tune Image

The tune image settings section allows you to control and tune the picture quality of the image. Keep in mind, the quality of the picture will also be affected by the quality of the lens that is being used.



White Balance: Select from the following options **auto, indoor, or outdoor**
Day and Night: Select the mode Day or Night
TV Output: Select the mode **enable or disable** to output to a T.V
Binning / Skipping mode: Binning enables low light-light performance. Select Binning, Skipping, 4x Binning mode (default is Binning)
BLC (Backlight control): Select from one of the options on or off to control the
Backlight: Select a value between (0~100%)
Brightness: Select a value between (0~100%)
Contrast: Select a value between (0~100%)
Saturation: Select a value between (0~100%)
Sharpness: Select a value between (0~100%)

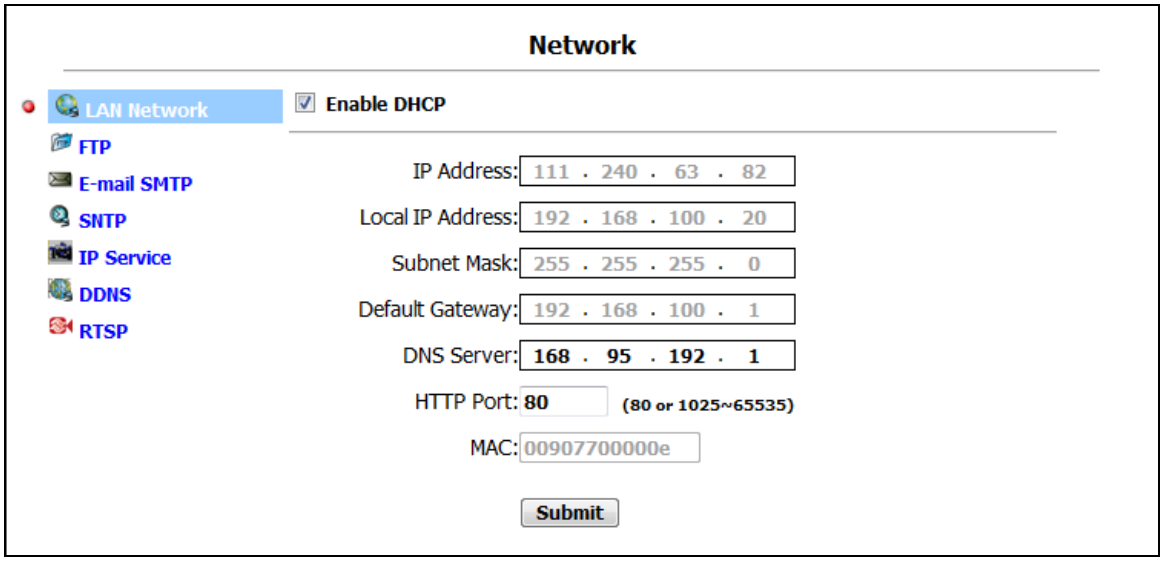


Default: To Return all values to normal default click on this button.

Note: Make sure you click on the Apply button to save any changes made

Network

Network


Network
LAN Network
FTP
E-mail SMTP
SNTP
IP Service
DDNS
RTSP
Enable DHCP
IP Address: 111 . 240 . 63 . 82
Local IP Address: 192 . 168 . 100 . 20
Subnet Mask: 255 . 255 . 255 . 0
Default Gateway: 192 . 168 . 100 . 1
DNS Server: 168 . 95 . 192 . 1
HTTP Port: 80 (80 or 1025~65535)
MAC: 00907700000e
Submit

The network section allows you to setup the network information for the IP Kamera 9070IR.

Enable DHCP: *This function will enable the DHCP for the device. If this is enabled the IP Address of the device will be automatically provided by the router of the device.*

IP Address: *Actual IP Address of the device can be found here*

LAN IP Address: *Local Area Network Address.*

Subnet Mask: *Subnet Mask information*

Default Gateway: *Default Gateway Address*

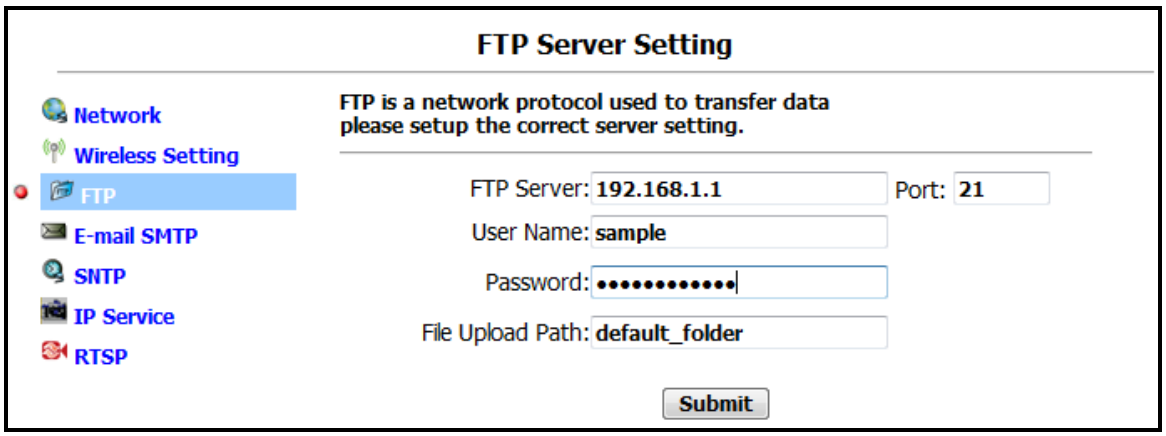
DNS Server: *Domain Name System Address*

Http Port: *Enter the port that you would like*

MAC: *The Mac Address or physical address of the device*

Note: *Make sure you click on the Apply button to save any changes made* Submit

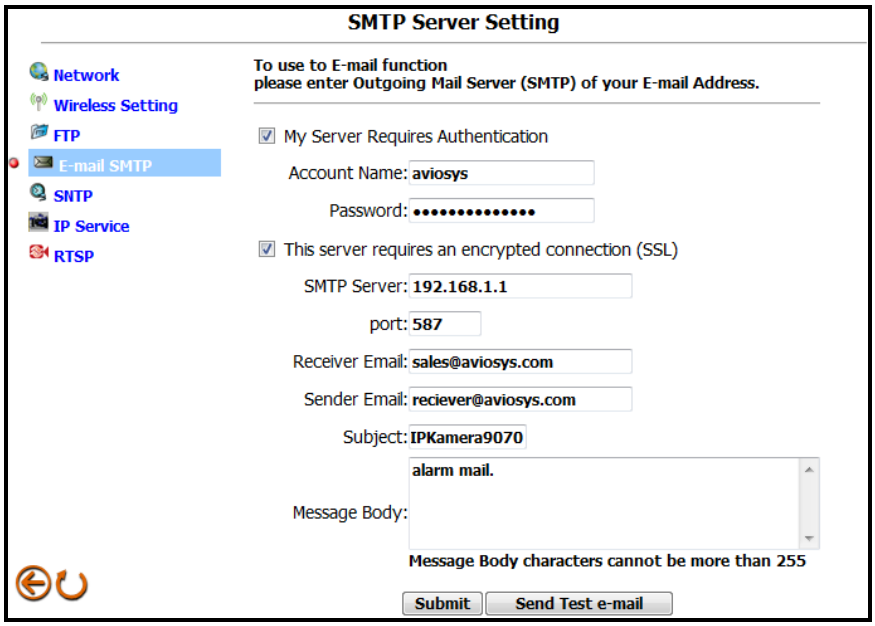
FTP



The FTP section of the IP Kamera 9070IR allows you to save video clips

FTP Server: The FTP server address is where the IP Address of the FTP server will be entered.
User Name: Enter the FTP Username
Password: Enter the FTP Password
File Upload Path: Enter the upload path of the FTP Server
File Upload Path*: Enter the upload path of the FTP Server*

SMTP (Outgoing E-mail Server)



Enter the SMTP E-mail server information here. The SMTP section allows the 9070IR to send emails out using the SMTP settings.

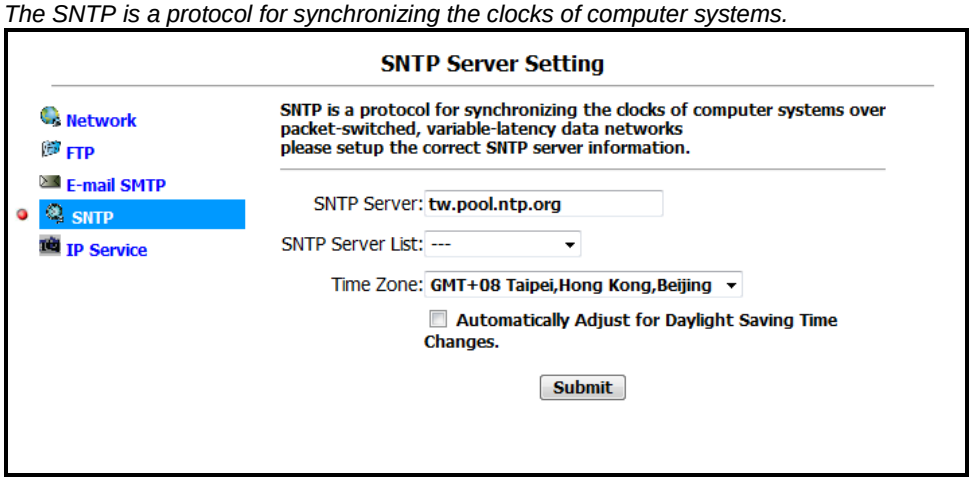
My Server Requires Authentication: Some servers require SMTP Authentication for security purposes. If your email server requires this option, make sure to have this section checked.
Account Name: Enter then login of the mail account
Password: Enter the password of the E-mail account
Use SSL Connect: If the email server requires SSL (Secure Sockets Layer) this option need
Sender Email: Enter the Sender Email Address

SMTP Server: Enter the SMTP Outgoing mail address
Email Address: Enter the Receiving Email address
Submit: After all settings have been made. Hit the submit button to save all changes.
Send Test E-Mail: This button will send a test e-mail to the designated account. This way, you can check to make sure that the settings are correct.

Note: If you are having problems sending emails out and the settings are correct. Please check your DNS Server address to make sure you can send email out.

SNTP

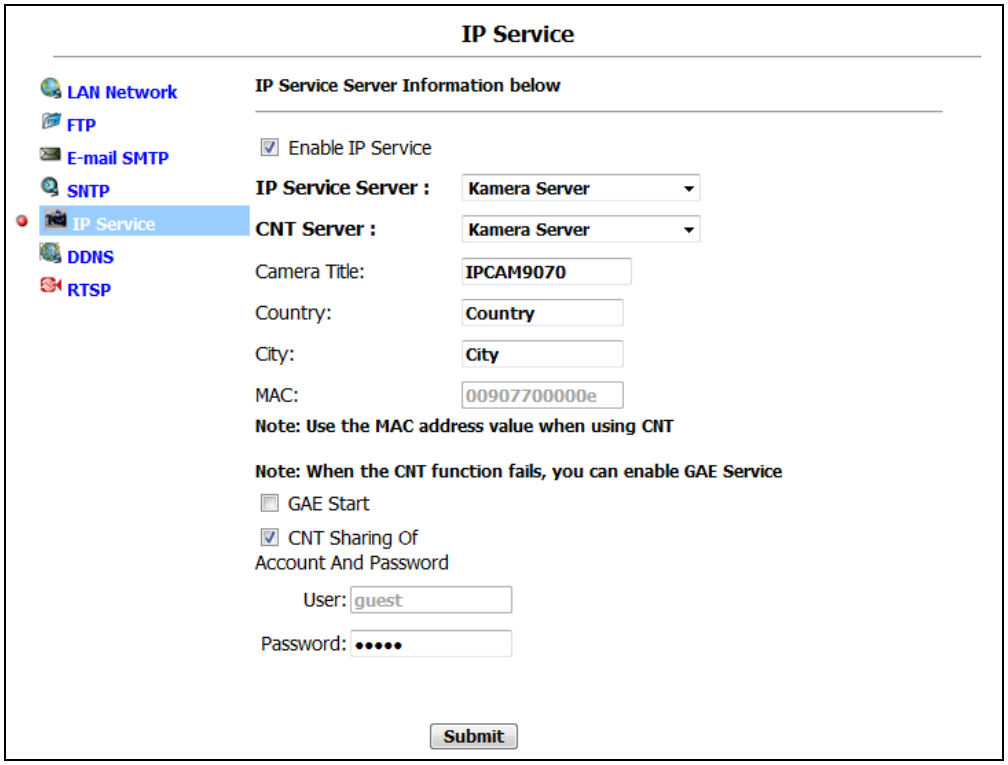
The SNTP is a protocol for synchronizing the clocks of computer systems.


SNTP Server Setting
Network
FTP
E-mail SMTP
SNTP
IP Service
SNTP is a protocol for synchronizing the clocks of computer systems over packet-switched, variable-latency data networks
please setup the correct SNTP server information.
SNTP Server: tw.pool.ntp.org
SNTP Server List: ---
Time Zone: GMT+08 Taipei,Hong Kong,Beijing
Automatically Adjust for Daylight Saving Time Changes.
Submit

SNTP Server: Enter the SNTP server address. Below are a list of free public NTP servers.
Europe — europe.pool.ntp.org
Asia — asia.pool.ntp.org
Oceania — oceania.pool.ntp.org
North America — north-america.pool.ntp.org
South America — south-america.pool.ntp.org
Africa — africa.pool.ntp.org
Time Zone: Enter the corresponding time zone

Automatically adjust for daylight saving time: Check this section if you want daylight saving time to be implemented automatically.

IP Service

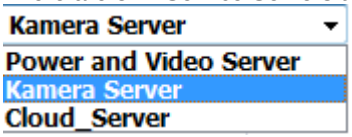


IP service is a added service that provides you a platform so you do not remember a long IP Address. Just enter the name of your device into IP Service and you can find your device.
Note: *Port forwarding will be required on your router to connect to the device*

In this section you can to turn off/on this service as well as select which server you would like your device on. .

Note: *IP Service is set to ON by default. To close this feature, uncheck the enable button.*

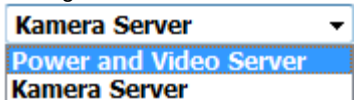
IP Service Server:
There are 3 IP Service Servers that can be selected from:



Power and Video Server: This is the server where most IP Power products and IP Video server products can be found.

Kamera Server: This is the IP server where most IP Kamera products from Aviosys will be found on.

CNT Server: Cross Network Technology Sever. CNT allows user to connect to their IP Kamera without having to Port Forward to the device.



Camera Title: This is the name of the device.
Country: The country where the device is located.
City: The city where the device is located.
MAC: Physical address or MAC of the device.

GAE Start: Will setup the device load information to the google cloud so that your device can be accessed on the cloud. See the section on www.myipedit.com for more information.

CNT Sharing of Account and Password: Cross Network Technology allows for your device to be reached without having to port forward. Here you can setup a guest CNT account which can be used in surf pop to access your device. To turn off this feature simply just uncheck the CNT box.

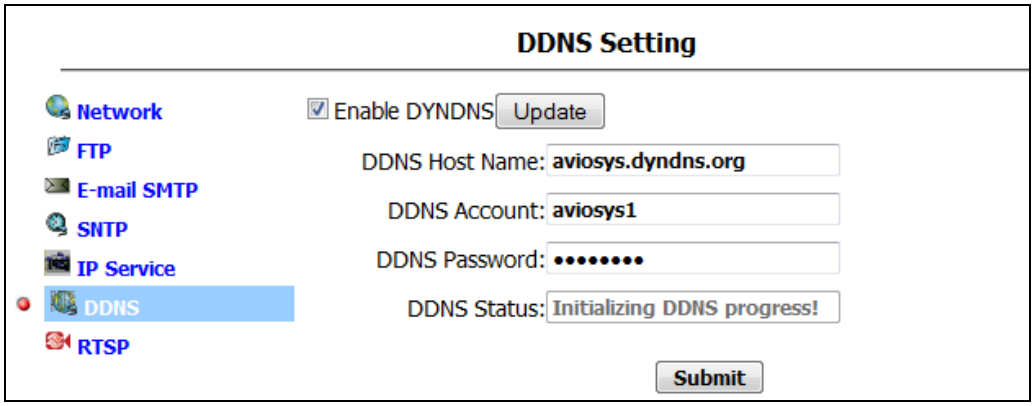
Once you have setup IP Service you can connect to IP Service through software IP Edit Search tool or through www.myIP Edit .com

Enable Share:

Check this feature to enable video sharing on guest accounts only. Make sure that the guest account has already been created in the user section. Once this section has been made you can come here to verify that
Note: This function is for IP Surf Pop software.
Please refer to the IP Surf Pop manual for more information at www.Aviosys.com

Please refer to the IP Surf Pop manual for more information at www.Aviosys.com

DDNS



The DYNDNS feature allows you to use dyndns with the 9070IR-PoE. All you need to do is sign up with a free account with www.dyndns.com and enter the appropriate information.

The update button will allow you to update the information.

DDNS Host Name: The name of the DNS address will be entered here.
DDNS Account: The login name you use for DYNDNS
DDNS Password: Password for the account.

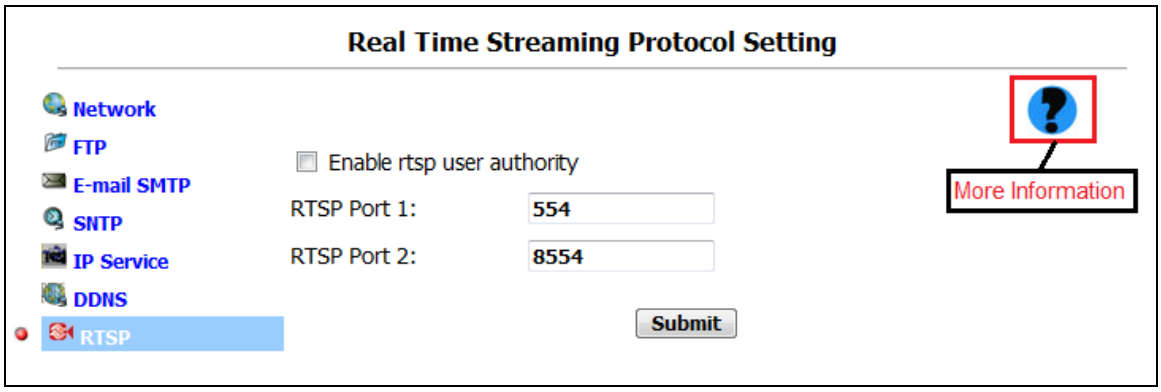
Once the information has been entered hit the submit button to start using dyndns.

RTSP

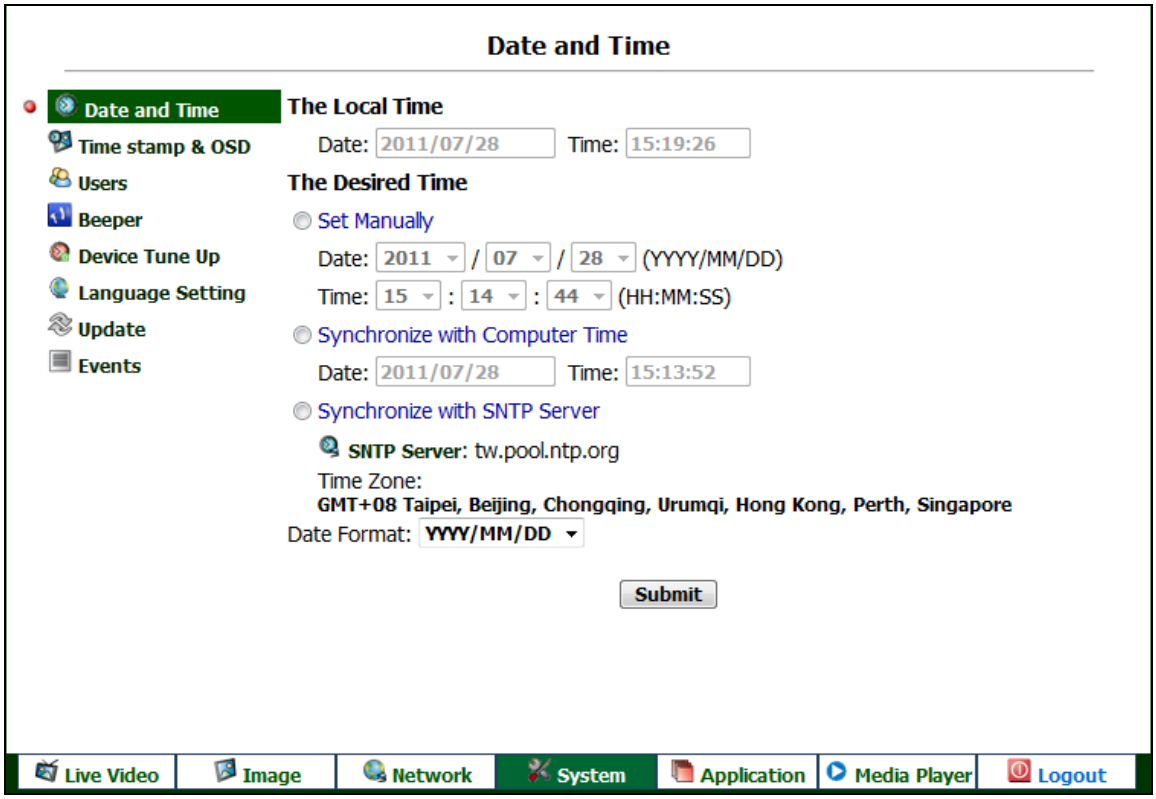
Real Time Streaming Protocol (RTSP) gives the device another way to stream live video. Using programs that support RTSP, you can broadcast the videos from the 9070IR live.

Note: To access the device from outside the network. Please make sure of the following:

9070IR should be set to DMZ host, or mapping router's TCP ports 554 and 8554 to 9070IR, preferably at the same time mapping UDP port 6970-9999

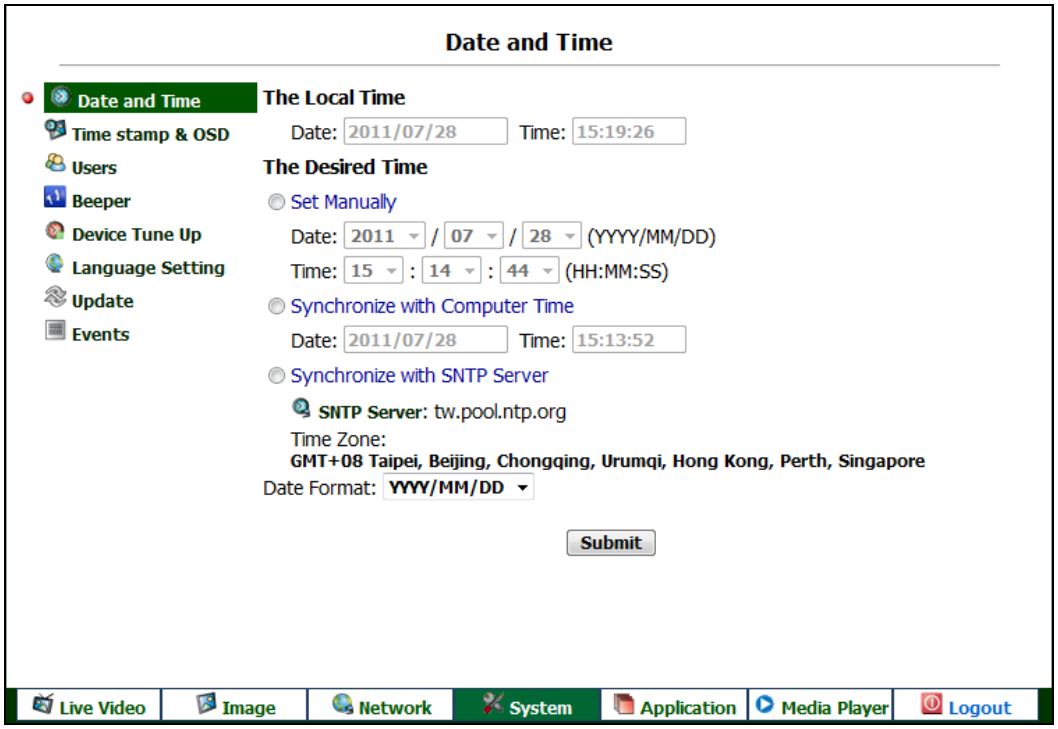


System



The system section allows you to setup the IP 9070's system configurations. This includes the following

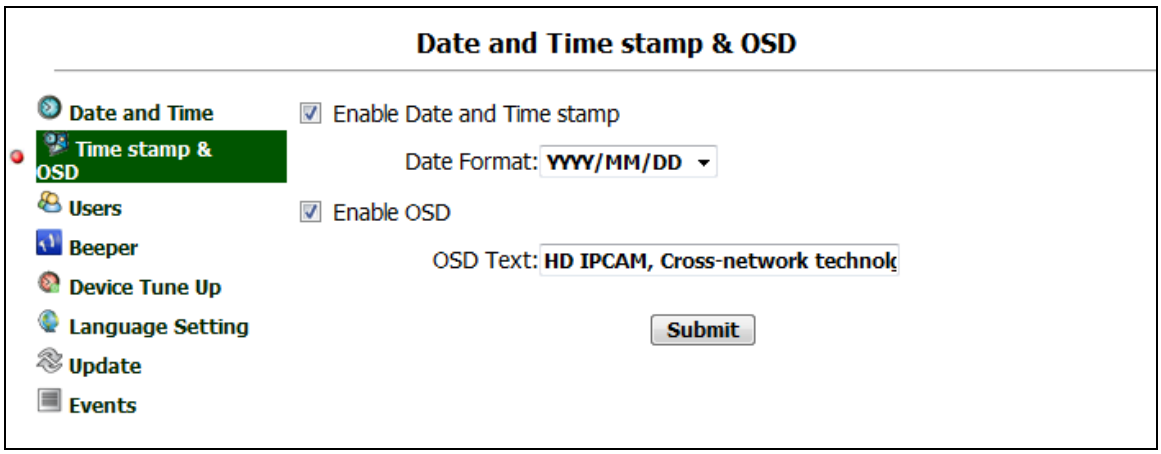
Date and Time



Set the date and Time of the device here.
The Local Time: The local time corresponds to the current time of the IP Kamera 9070IR.
Time Setup: Setup the current time of the device here

1.) **Set Manually**: Set the time manually
2.) **Synchronize with Computer Time:** Synchronize the time with the current computers time
3.) **Synchronize with SNTP:** Synchronize with SNTP

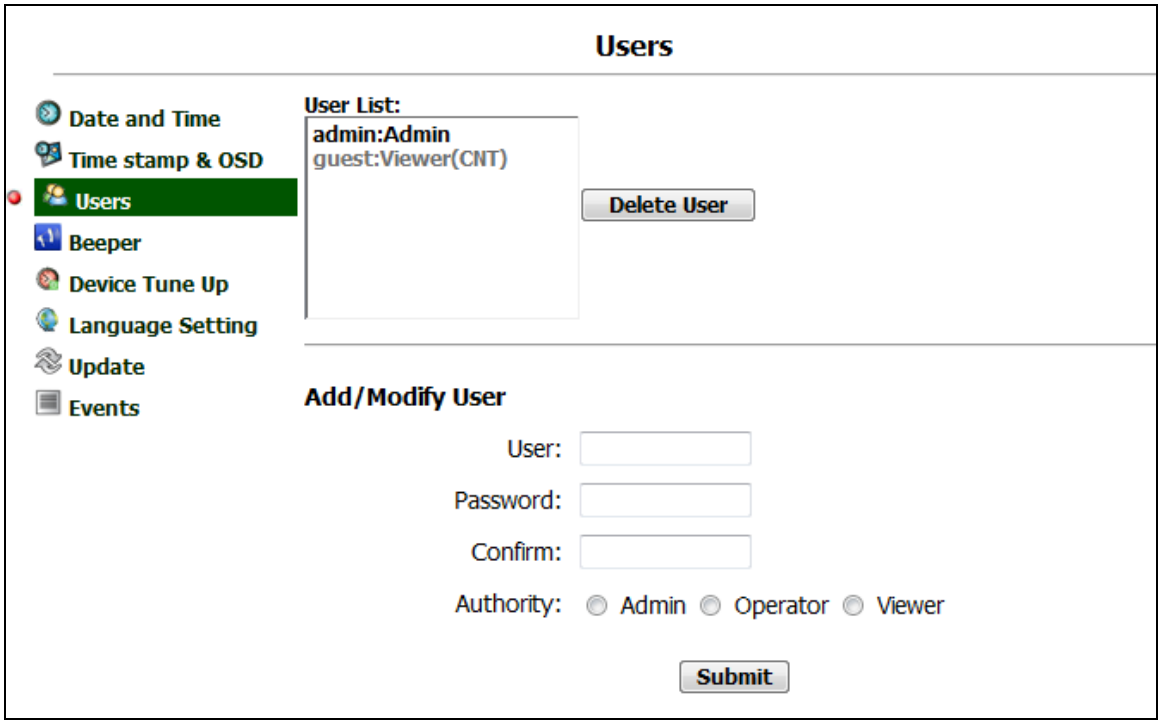
Time Stamp &OSD



The time stamp adds a time to the live video.
When a recording is made a time stamp will show up with in the video file that is being recorded.

To enable the Time Stamp please check the enable box.

User



In this section, you can create different user access rights for different types of users.

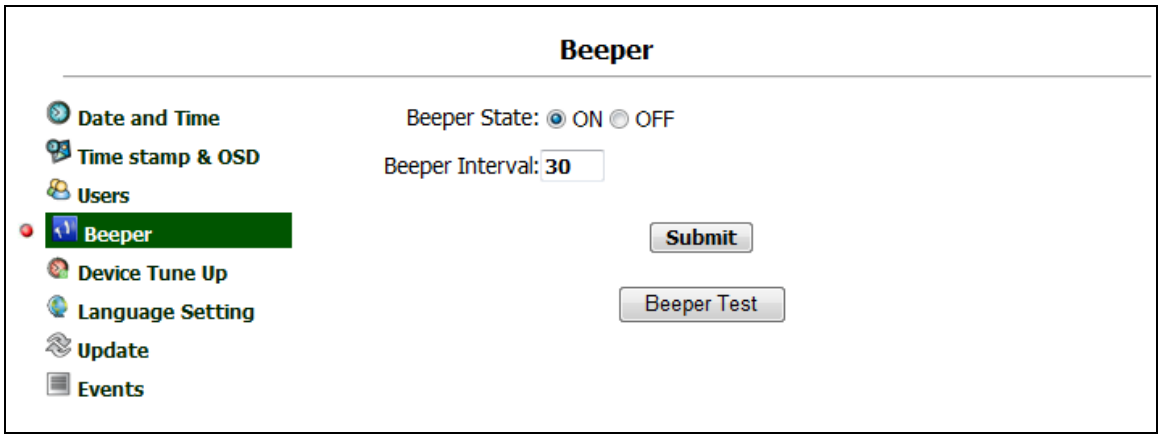
Authority: Select one of the following options:

Admin: You can operate all functions in Web interface. Also, you can add or delete any user's account.

Operator: You can operate all functions in Web interface except user Add/Delete.

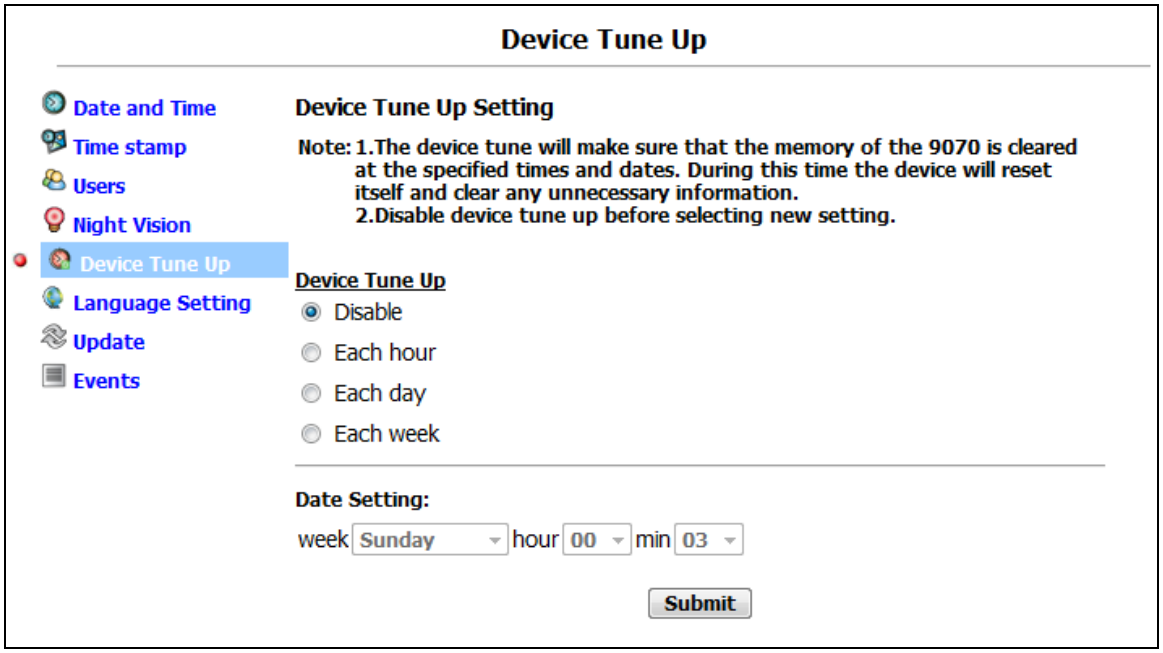
Viewer: You can only monitor the Web interface, but cannot operate all function and set parameters.

Beeper



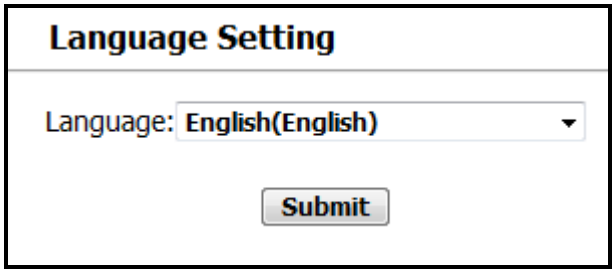
The Beeper allows the device to make beeping sounds when there is no network connections. From here you can set the better settings and run a beeper test.

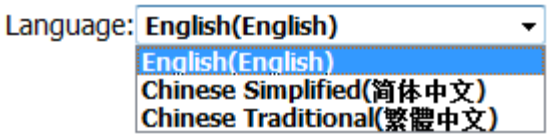
Device Tune Up


Device Tune Up
Date and Time
Time stamp
Users
Night Vision
Device Tune Up
Language Setting
Update
Events
Device Tune Up Setting
Note: 1.The device tune will make sure that the memory of the 9070 is cleared at the specified times and dates. During this time the device will reset itself and clear any unnecessary information.
2.Disable device tune up before selecting new setting.
Device Tune Up
Disable
Each hour
Each day
Each week
Date Setting:
week Sunday hour 00 min 03
Submit

The Device tune up section allows the device to restart itself and clear the memory during the desired time. With this function you can set the device tune up to each hour, each day, or each week. Using this function the device will run very smoothly and can be refreshed daily.

Language

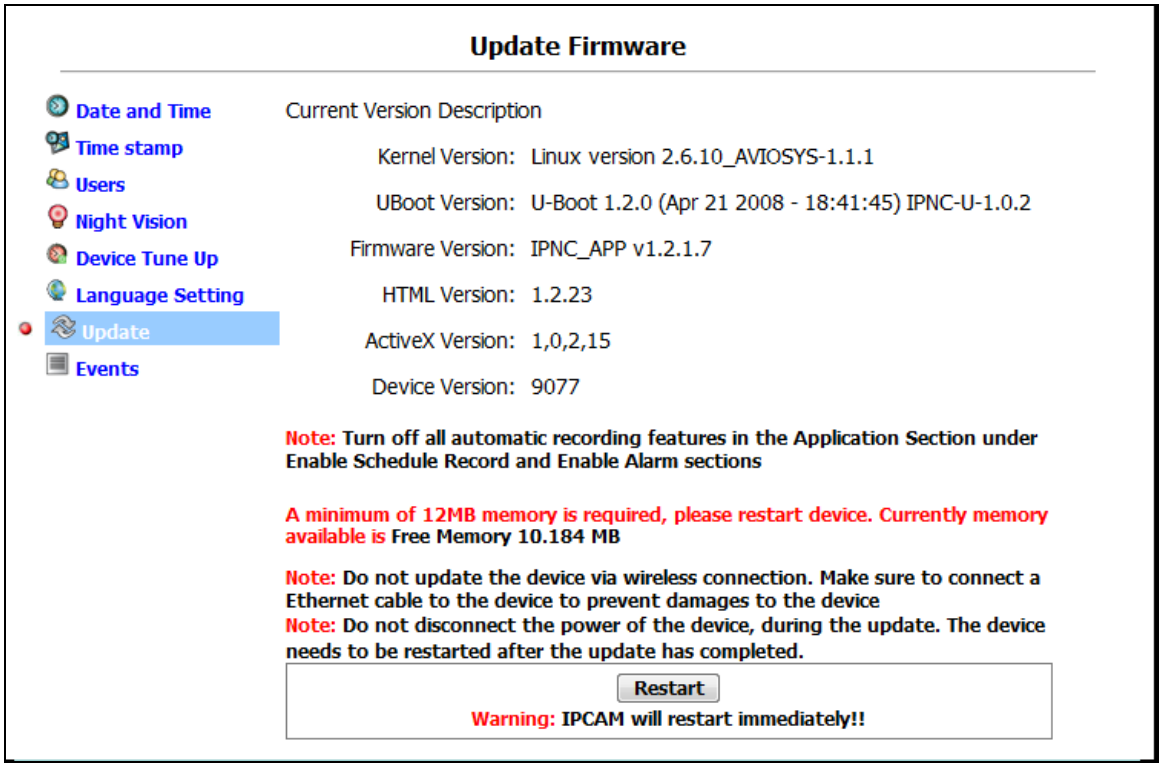




The language setting section is where you can select the language that you would like to use to use the 9070IR. Currently there are 3 languages available: English, Chinese (Traditional), Chinese (Simplified).

The 9070IR will automatically detect the favored language of choice depending the settings used in Windows.

Update


Update Firmware
Date and Time
Time stamp
Users
Night Vision
Device Tune Up
Language Setting
Update
Events
Current Version Description
Kernel Version: Linux version 2.6.10_AVIOSYS-1.1.1
UBoot Version: U-Boot 1.2.0 (Apr 21 2008 - 18:41:45) IPNC-U-1.0.2
Firmware Version: IPNC_APP v1.2.1.7
HTML Version: 1.2.23
ActiveX Version: 1,0,2,15
Device Version: 9077
Note: Turn off all automatic recording features in the Application Section under Enable Schedule Record and Enable Alarm sections
A minimum of 12MB memory is required, please restart device. Currently memory available is Free Memory 10.184 MB
Note: Do not update the device via wireless connection. Make sure to connect a Ethernet cable to the device to prevent damages to the device
Note: Do not disconnect the power of the device, during the update. The device needs to be restarted after the update has completed.
Restart
Warning: IPCAM will restart immediately!!

The Update Firmware section is where information on the 9070IR is displayed.

*The **Kernel Version**, **Uboot Version**, **Firmware Version**, and other technical information on the device is displayed here.*

Updating the Device

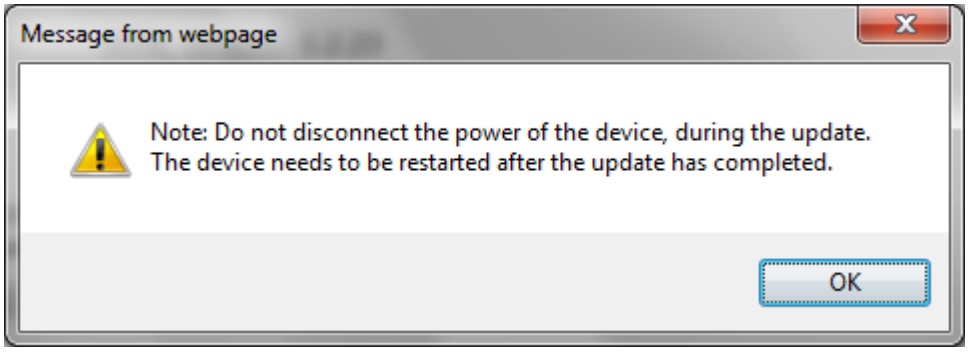
Note: The 9070IR-PoE will calculate if you have enough memory to update the device. If not you will be required, turn off all automatic recording functionality and restart the device. Then you will have enough memory to restart.

To update the device go to the update section. Here you will find the Current Version description.
To update the device:

1.) Browse for the correct update file.

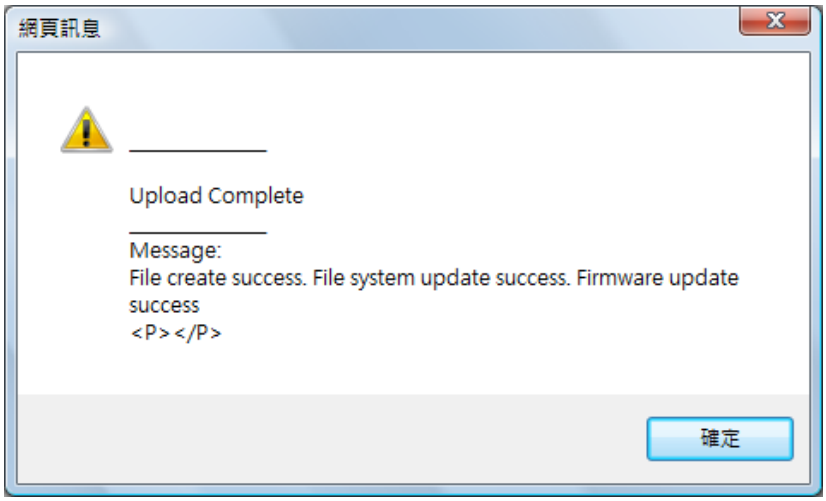
2.) Hit the update button.

3.) A message will appear, reminding you not to disconnect when updating.


Message from webpage
Note: Do not disconnect the power of the device, during the update.
The device needs to be restarted after the update has completed.
OK

4.) Please wait for the loading circle to finish, and wait for an update confirmation page.

5.) Once the device is updated you will see a update confirmation and click okay.

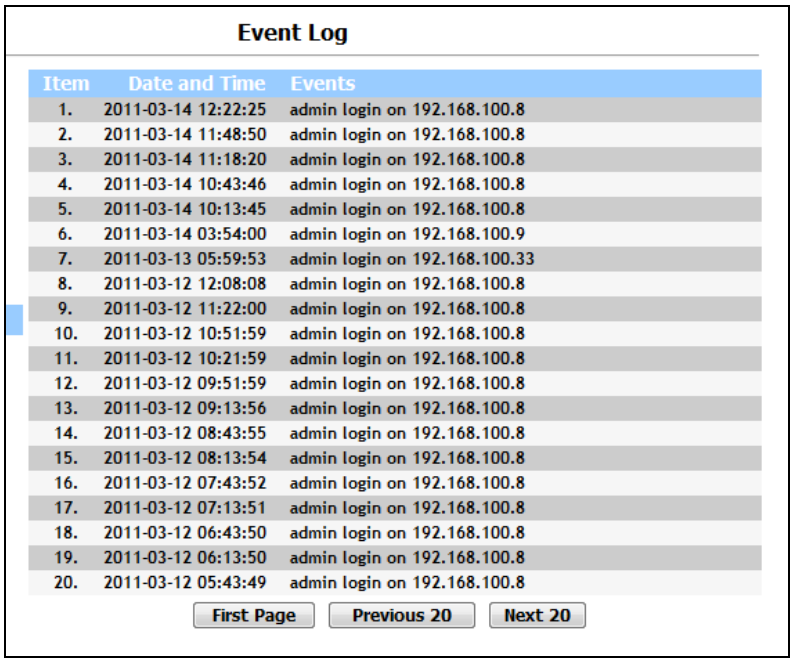


Warning: Before you go to the next step make sure you have all your setting information written down. The device will reset back to manufacturers default values after you restart the device. You will need reconfigure the IP Kamera 9070IR, including Email, FTP, IP Address, Gateway, and etc.

6.) Unplug the device then plug it back in.

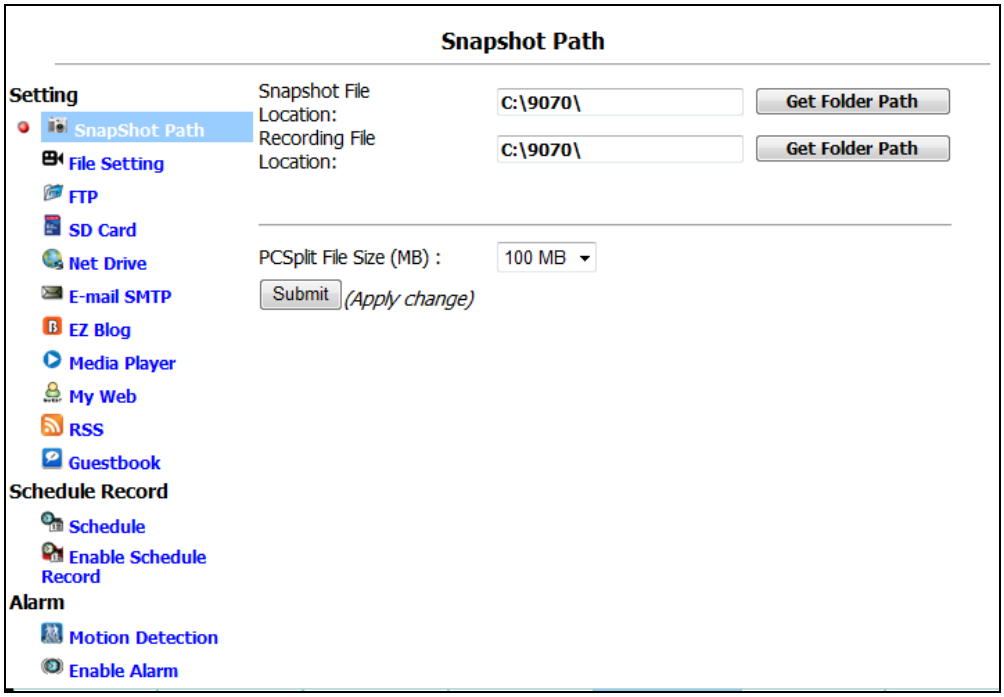
7.) Then make sure you re-setup the device.

Event Log



In the Events Log section you can find the log for the IP Camera. This section will notify you any events that have taken place with the IP Kamera.

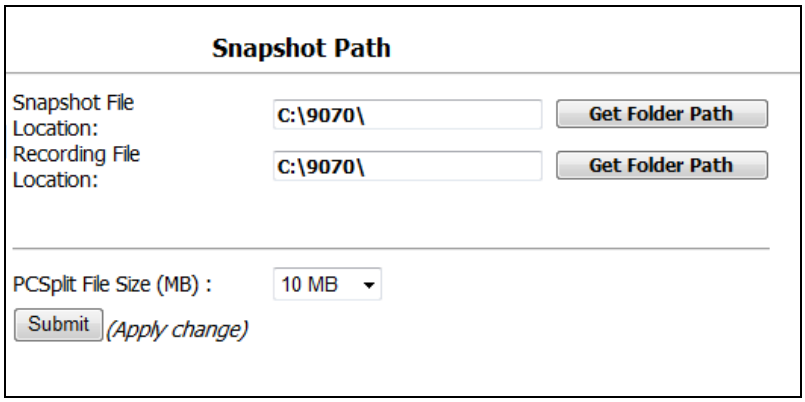
Application



The Application Section setups the Video File information, FTP, SD Card, SMTP

Setting

Snapshot Path

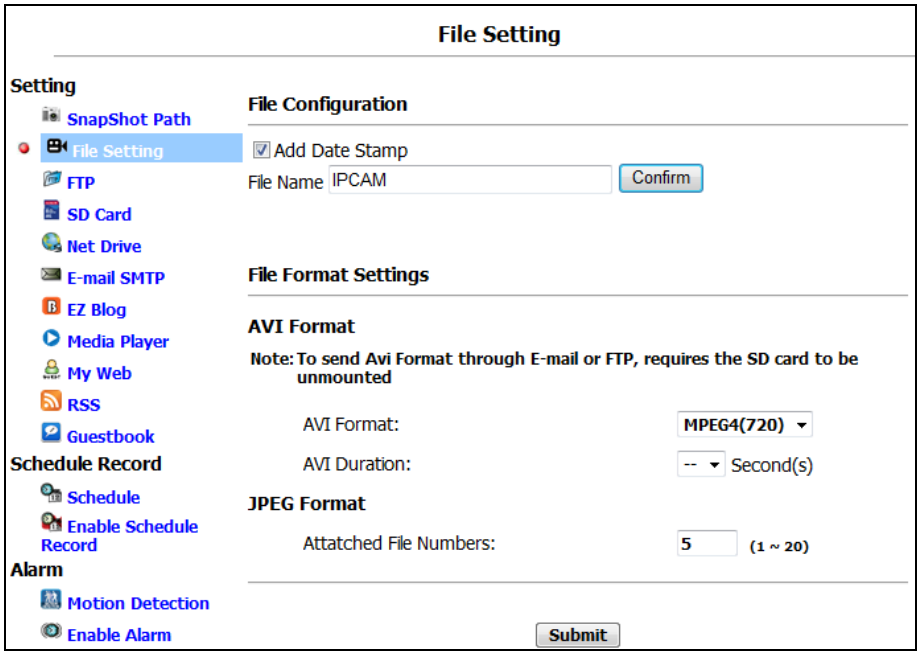


The snapshot path section allows you to configure where you would like your live snapshot and recording files are stored on your local computer. Simply, click on the

button and choose a folder to where you want to save the files.

PC Split File Size: Allows you to select the segment size of the files that will be recorded onto your computer.

File Settings



The file settings page allows you to configure certain settings for files that are sent to E-mail, FTP, or SD card.

File Configuration: Under this section you can select a prefix name for your recorded files. Here you can also add a date stamp to your files by checking the box that says **Add Date Stamp**

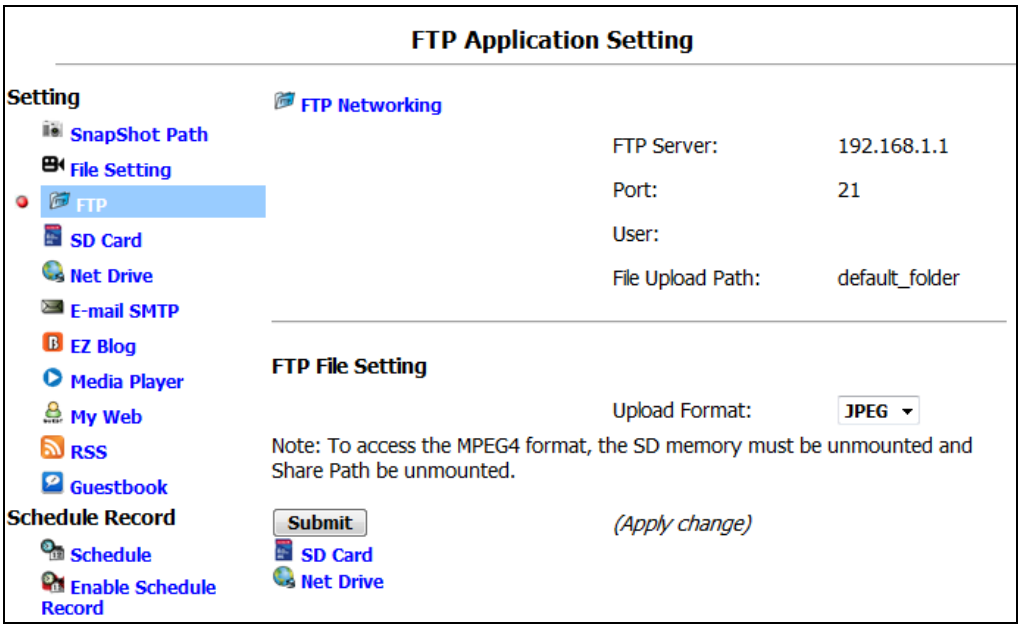
File Format Settings: In this section you can select the file that type that you would like to record in. Depending on the resolution and video codec selected you can choose from various format types.

Select the Video File format that the device will record in.

1.) **Avi Format:**MPEG4 (720) & MPEG4 (CIF)

2.) **Avi Duration:** From the drop-down list, select the length of an AVI file, then press submit

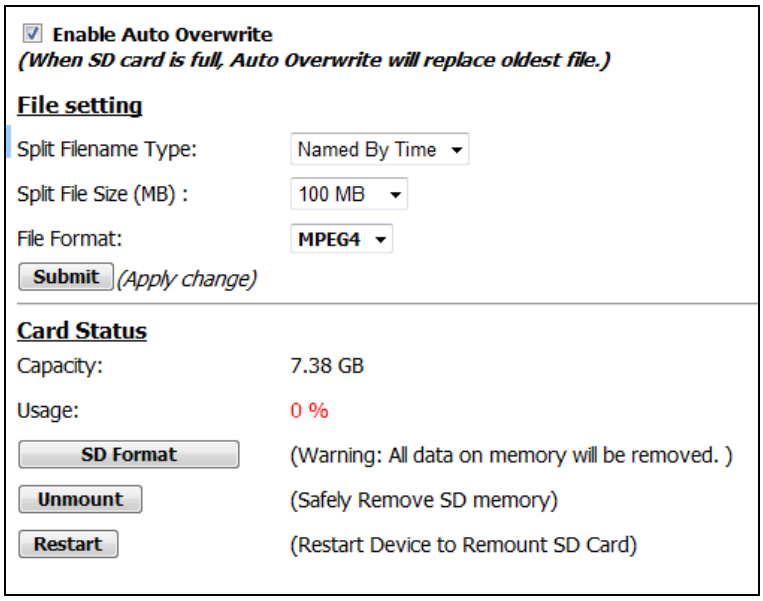
3.) Jpeg Format: The attached number of files is where you can select the number of pictures you would like the device to take. FTP



The FTP application settings page, is where information on the device's FTP can be found. If not FTP information was entered the section would be blank. By simply clicking on the FTP Networking it will take you to the page where the FTP information can be entered.

Note: Also make note that if the SD card is mounted to the device, the 9070IR-PoE will only be able to record in M-Jpeg mode. The SD card can be unmounted in the SD card section by clicking on SD Card

SD Card



The SD card section is where settings to setup the SD card recording is located. In this section you can configure

Enable Auto Overwrite: Auto Overwrite allows the device to automatically replace the oldest file on the SD card when it is full.

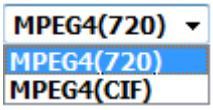
Split Filename Type: Allows you to sort the file into two different methods.

Name by Time: If add date stamp in the

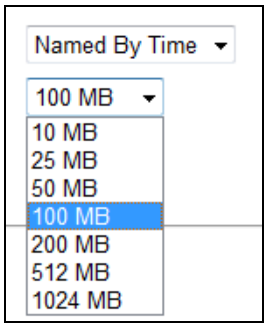
section is selected the 9070IR-PoE will sort the device by time.

Name by Index: If add date stamp is not selected, the 9070IR-PoE will sort by Index.

File Format: Here is where the file format for the recordings can e selected.



Split File Size: Select the size of each file that will be saved into the SD.
You can select from:
10mb, 25mb, 50mb, 100mb, 200mb, 512mb, 1024mb



SD Format: SD format will format the entire SD card

Unmount: The feature will unmount the SD card from the device, so it cannot be accessed unless remounted.

Reset: To mount the SD card back onto the device, you can use the button

Net Drive

The net drive function allows you to save your recordings to a local network computer. This provides a extra storage place for pictures and videos from motion detection and schedule recording.

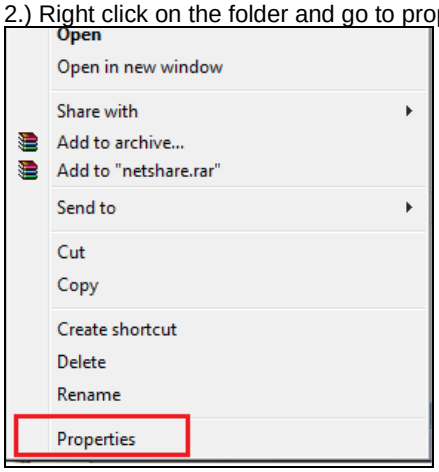
Setting up Computer (Windows 7)

To use the Net Drive functionality you will need to setup your computer to allow network sharing.

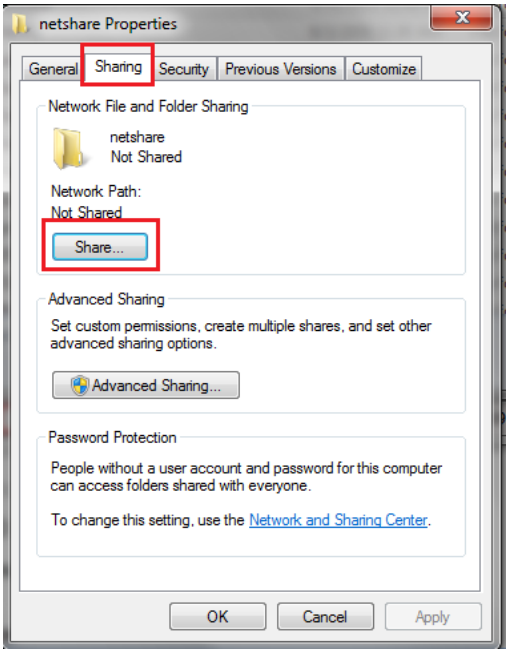
To do that follow the following steps:

1.) Select the drive that you would like to use to store your files.

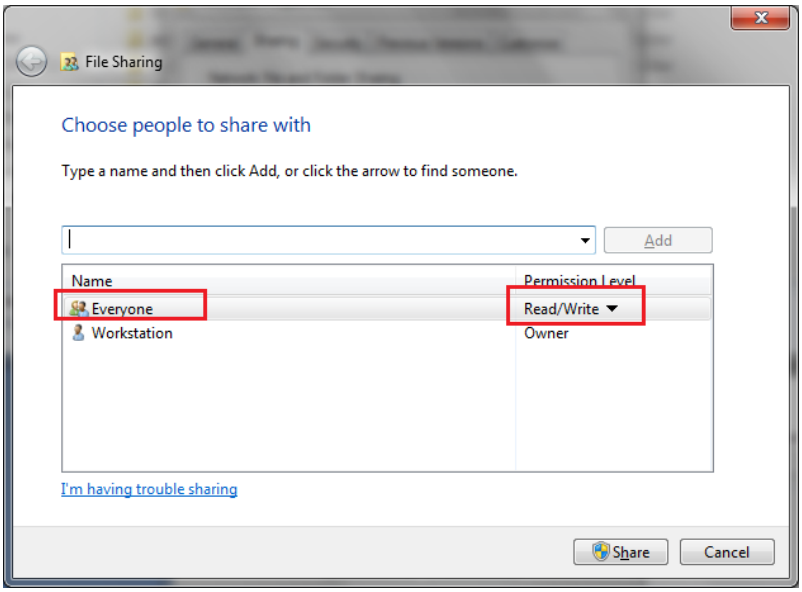
2.) Right click on the folder and go to properties.



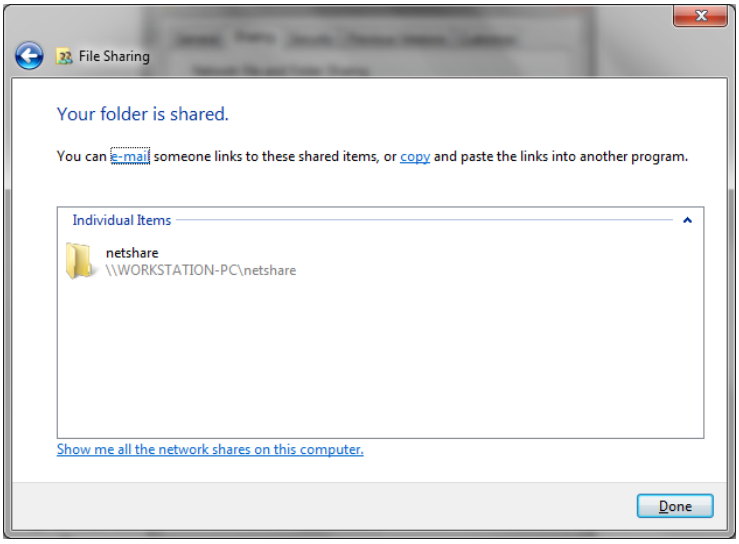
3.) Select the sharing tab and click on the share button.



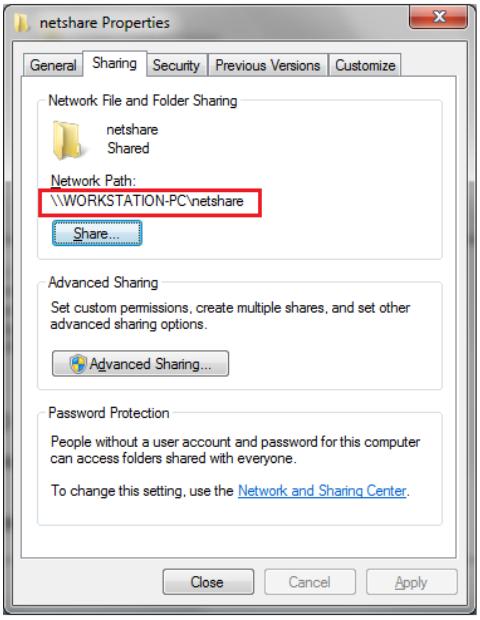
4.) Here you can select a user in your windows OS that you would like to share with or Everyone which will share this drive with everyone on your network. Select everyone and hit the add button.
Note: The user selected must have Read / Write capabilities for this function to work correctly.



5.) Then hit the share button on the bottom and you should receive a confirmation to show that the folder has been shared.


File Sharing
Your folder is shared.
You can e-mail someone links to these shared items, or copy and paste the links into another program.
Individual Items
netshare
\\WORKSTATION-PC\netshare
Show me all the network shares on this computer.
Done

6.) Click the done button and it will take you back to the folders properties. Under the sharing tab you will find a section that says network path.
Copy that information and put it into the 9070IR-PoE webpage in the net drive section.



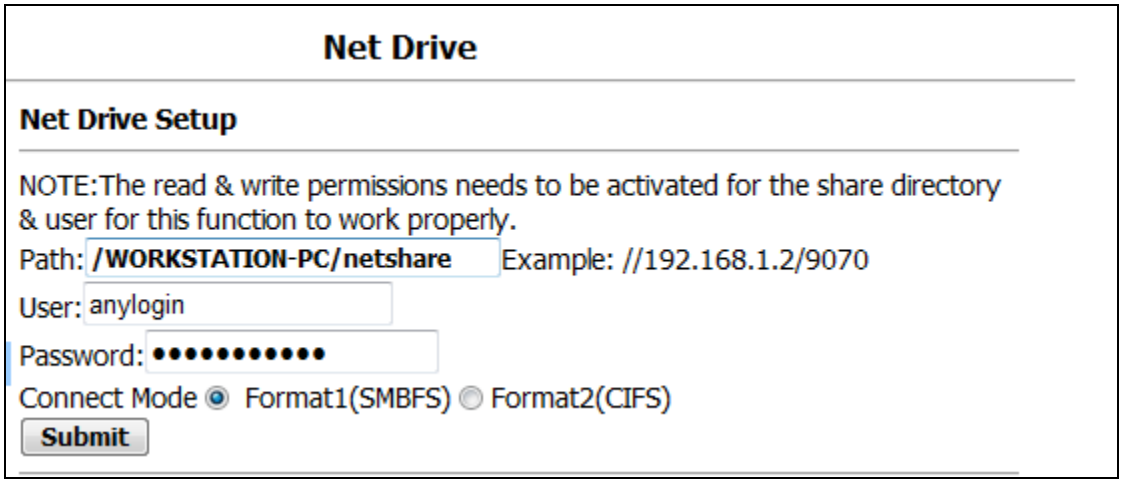
Setting up Net Drive

After the computer has been setup. Now you will need to setup the net drive in the 9070IR

1.) For the login and password since we have selected **everyone** as the sharing user, simply type in any login or password.

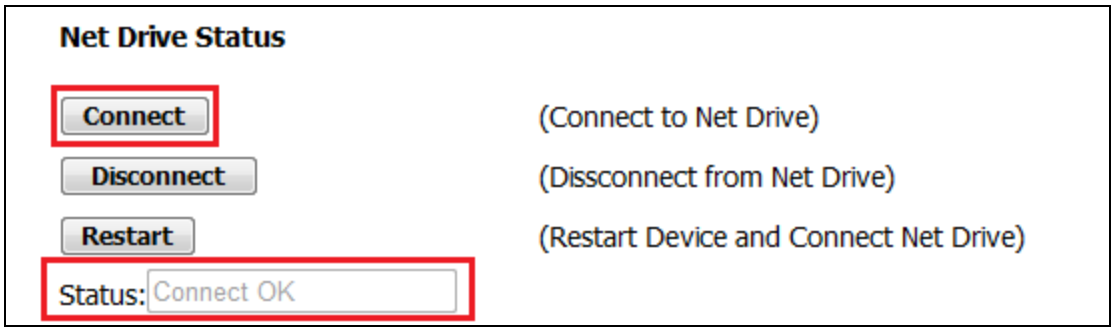
In the case where you have selected a specific user to use here you will need to use the login and password of the specified user.

Under the connect mode, you can select from Format 1(SMBFS) or Format2(CIFS) depending on your computers setup. Hit the submit button when finished.

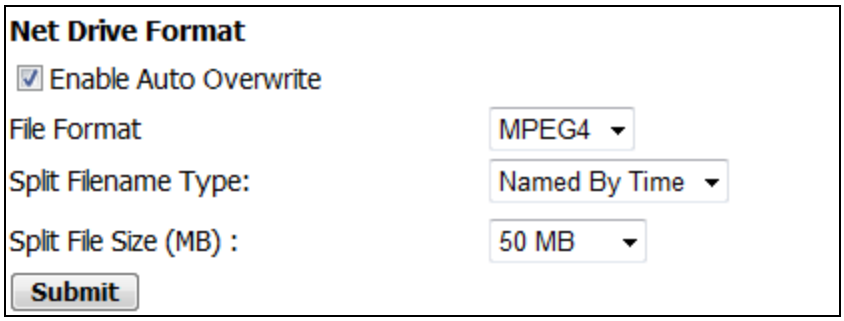


2.) Next under Net Drive status click on the Connect button to make sure that the net drive has been setup correctly. When the Net Drive is connected successfully it will say Connect OK

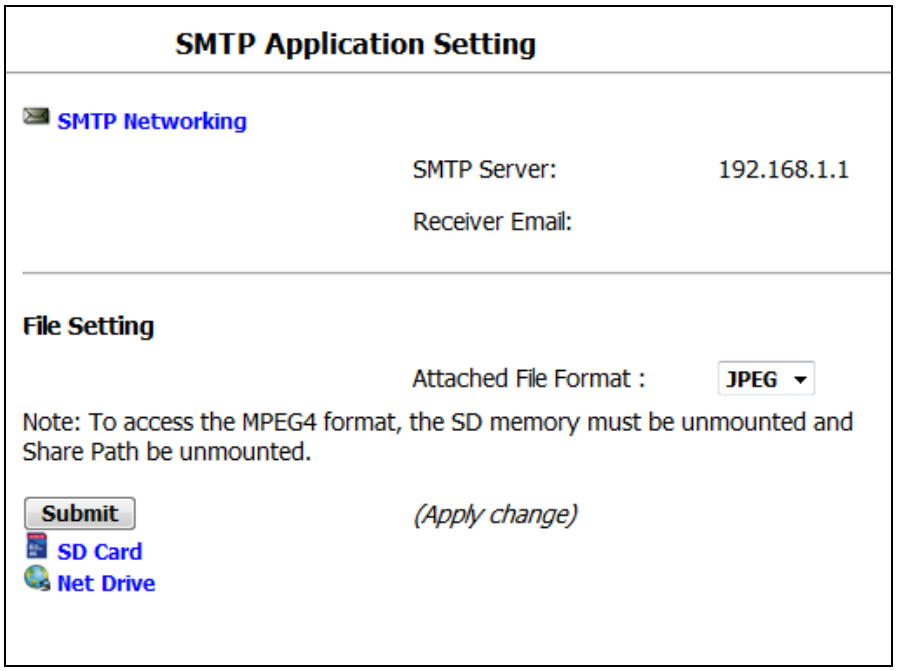
In this section you will find a button to disconnect the Net Drive as well as restart the net drive.



3.) Now select the split size to select how big you want the files to be. Then hit the submit button and the net drive will start to work.



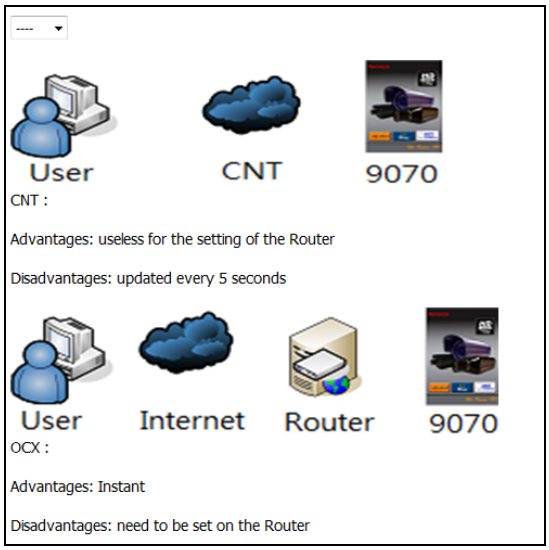
E-mail SMTP



The SMTP application settings is where the file format uploaded by email can be selected. From here you can choose the files to be in either Jpeg (picture) format or Mpeg.

Note: To use the device in Mpeg format make sure to unmount the SD card of the device first.

EZ-Blog

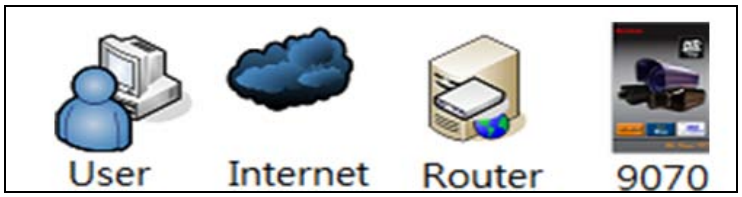


EZ Blog is a an easy way to integrate your IP camera with your blog or website. Simply by using the code produced you can have live video from your IP camera on your blog and websites.

Start by selecting which method you would like to use EZ blog.

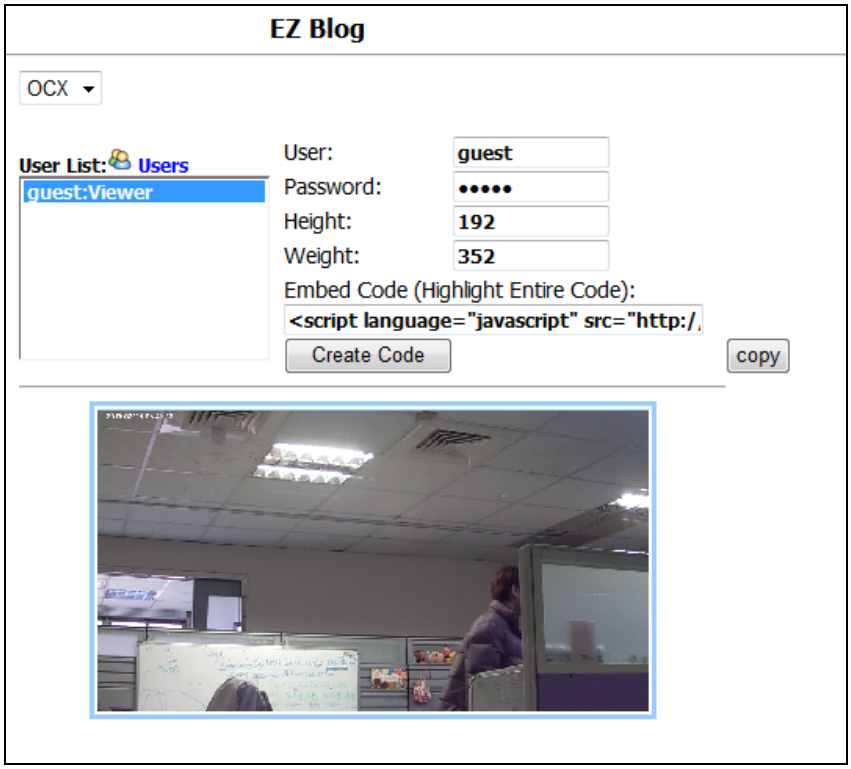
There are two ways that you can use EZ blog.

1.) Using OCX to broadcast EZ blog



Advantages of using OCX: Instant Response
Disadvantages: Router needs to be setup in order to use this method.

Note: To use EZ blog through OCX you will need to make sure that your device has been properly port forwarded. Furthermore, the blog platform being used needs to support java script like (i.e. Blogspot)

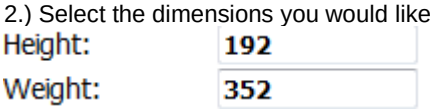


User List: The user list shows the available users you can use to setup EZ Blog. We highly recommend to use guest accounts and if a guest account is needed you can easily do so by accessing the Users menu.

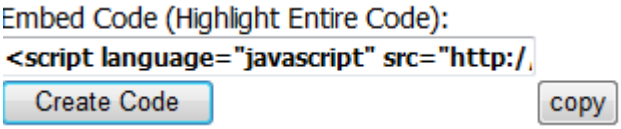
Once the user is selected, now you can easily create the embed code:

1.) Type in the password for the selected user.

2.) Select the dimensions you would like the image to be



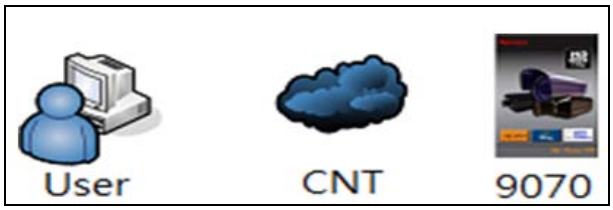
3.) Select the create code button to create the embed code



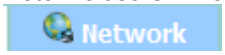
4.) Press the copy button to copy the code that you would like to use. You can highlight the embed code from inside the box and then copying (ctrl + C) or you can just hit the copy button to copy the code.

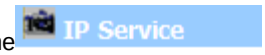
5.) Once the code has been copied, place that code somewhere in the body of your blog or website and a video will be displayed on the screen.

2.) EZ blog through CNT

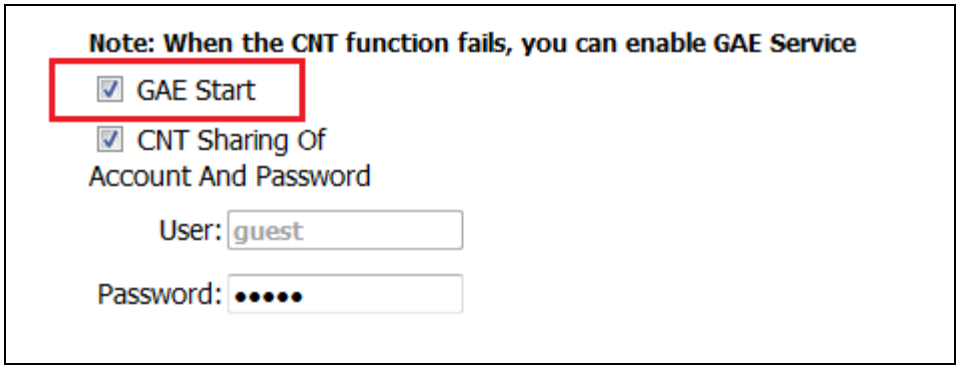


Advantages of using CNT: Does not require router setup to use. Can cross network, simply plug and play.
Disadvantage: Requires constant communication to make sure device is connected.

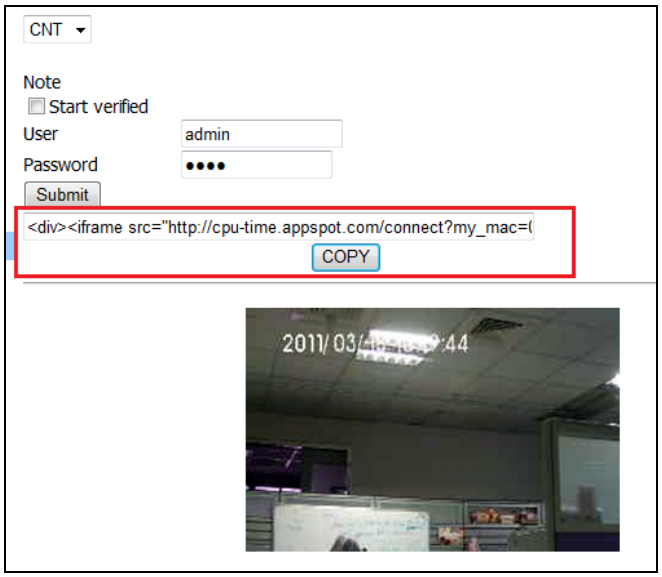
Note: To use CNT feature, the GAE server must be turned on. You can do this by going to the 

network tab, and click on the 

IP Service link



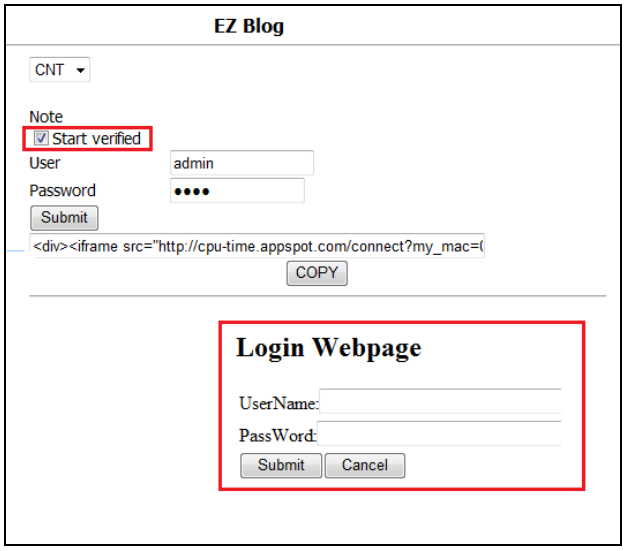
To use CNT to integrate your IP camera with your blog:



1.) After you have enabled the GAE feature, click on the copy button of EZ Blog by pressing the copy button.
2.) Then paste the code into your blog or website.

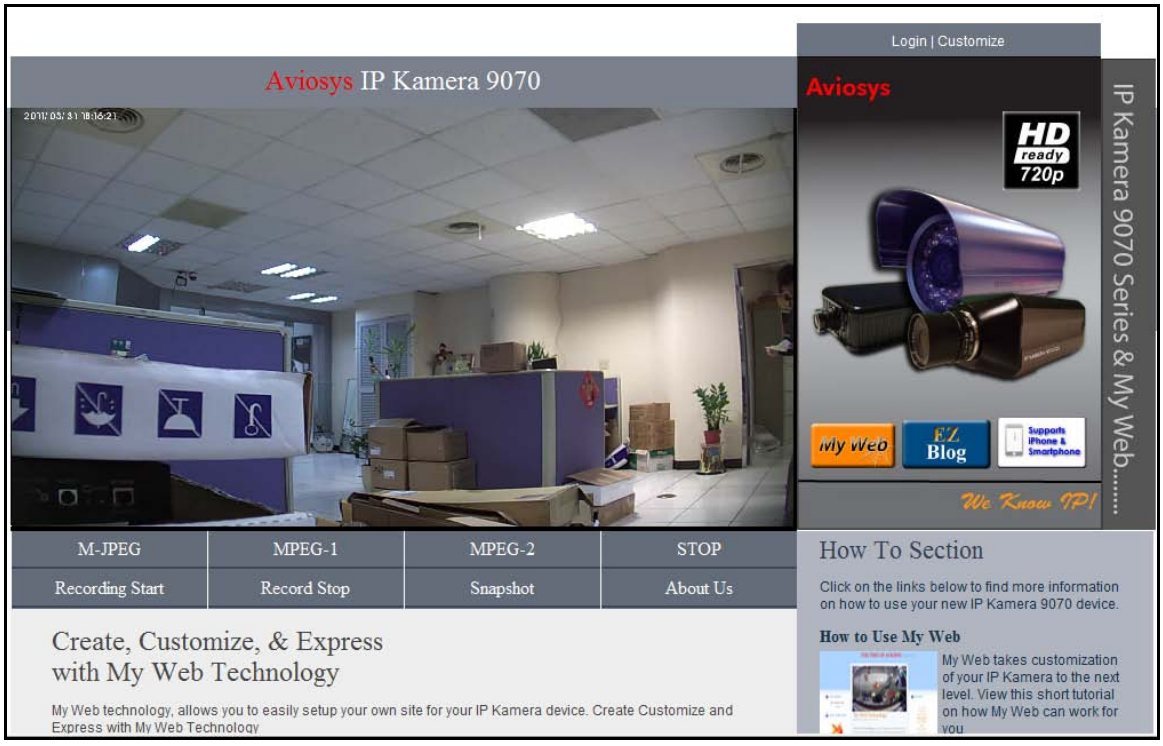
If user verification is needed you can do the following:

1.) Check in the box that says start verified.
2.) Type in a preferred login and username.
3.) Then hit the submit button.
4.) On the bottom where you can preview the image you will see that it will show a login screen.



5.) Then hit the copy button and paste the code that you have copied into your blog or website.

My Web

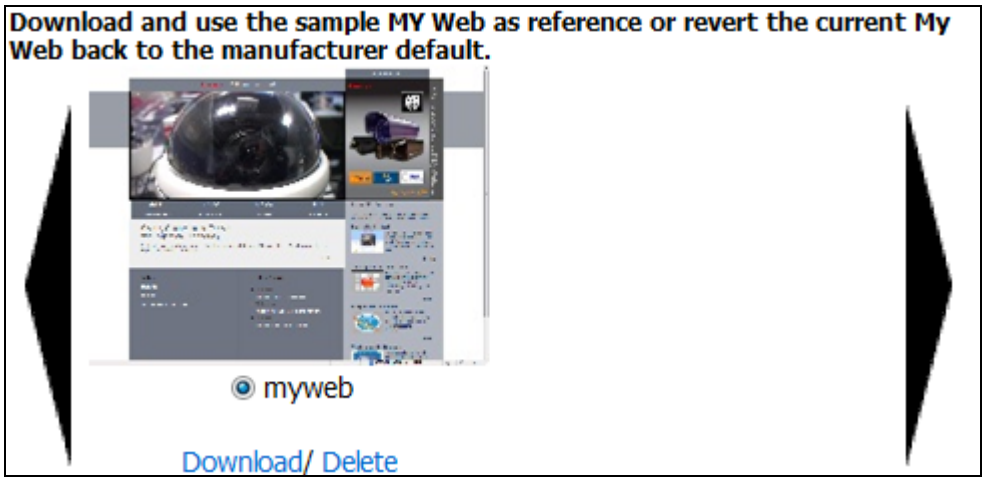

Login | Customize
Aviosys IP Kamera 9070
Aviosys
HD ready 720p
IP Kamera 9070 Series & My Web.....
My Web
EZ Blog
Supports iPhone & Smartphone
We Know IP!
M-JPEG
MPEG-1
MPEG-2
STOP
Recording Start
Record Stop
Snapshot
About Us
Create, Customize, & Express with My Web Technology
My Web technology, allows you to easily setup your own site for your IP Kamera device. Create Customize and Express with My Web Technology
How To Section
Click on the links below to find more information on how to use your new IP Kamera 9070 device.
How to Use My Web
My Web takes customization of your IP Kamera to the next level. View this short tutorial on how My Web can work for you

The My-Web functionality will make your IP Kamera more than just a surveillance tool. Now you can use it to promote your company, restaurant, business, school, and etc. With some basic website skills or tools any can make a My Web site.

Turning On My Web

Enable my web button:
The enable My Web button will activate the My Web functionality. Once enabled every time the device is accessed it will be set to the My Web Page.
Login Required:
The login required will require your My Web users to login to the device before being able to use it. This is a way to keep unwanted viewers from entering the My Web

How to use my WEB


Download and use the sample MY Web as reference or revert the current My Web back to the manufacturer default.
myweb
Download/ Delete

1. Download sample.
2. Save the zip file to the location .
3. Press browse, and select the zip file you download.
4. Press upload and send the zip file to 9070IR web.
5. Confirm setting .

*** If familiar with webpage langrage, you can change the webpage in zip file to your own webpage. ***

Setting up My Web

To setup My Web you can download the My Web file from the 9070IR.

1.) Click on the Download Default Page.
2.) Save the Zip file to a location where you can edit it
3.) Extract the file functions.js

4.) Start creating a My Web and be sure to include the functions.js into your code. (Note: Do not include folders within the webpage.
5.) After you have created the webpage, make sure to create a Zip file. Zip up the file and

Returning to default My Web page

If you would like to return your 9070IR to the default My Web page click the default My Web Page button. This will reset the current My Web to the original manufacturer default.

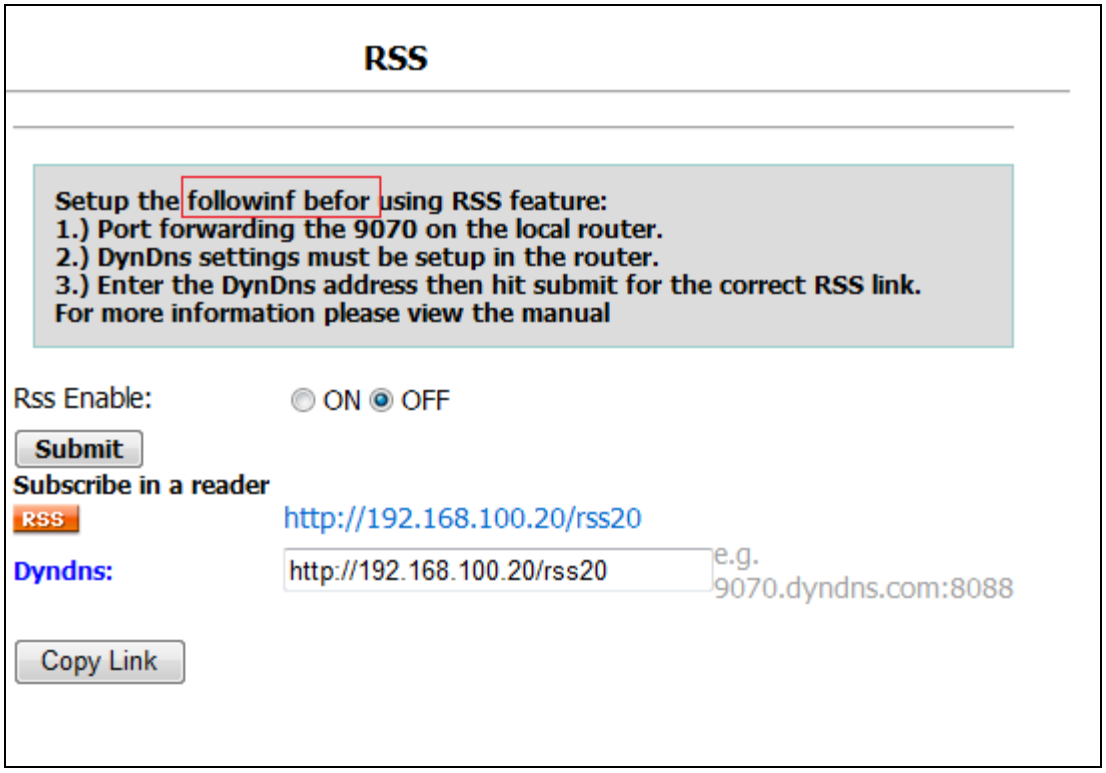
Using My Web

To use the My Web feature:

1.) Use IP Edit and directly log into the IP camera.
2.) The device will open the root page of the 9070IR to the My Web page.
3.) If you would like to return to the normal administrator page for the 9070IR you can login to the admin site.
For Example:

9070IR IP Address: 192.168.12.111 **Port**:8080
Then on the web browser type in the following
http://192.168.12.111:8080/index.htm

RSS



The RSS feature of the 9070IR-PoE will allow the user to be constantly informed about the device. Using RSS any snapshot, motion detection, scheduled recording will notify the user and can also be accessed

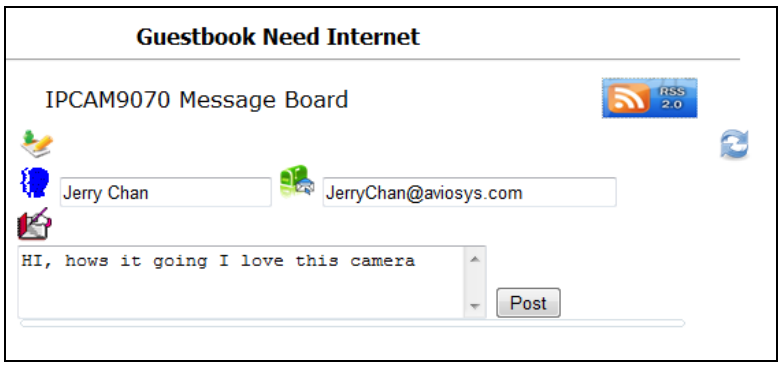
***Notice: User need to register in DDNS ***
In the Dyndns section, type in the Dyndns that you register from www.dyndns.com and add a /rss20.

Guestbook

The guestbook feature is new feature to IP camera which allows the you to interact with other people who you have gave access to your device. Currently this feature is just for surf pop interaction

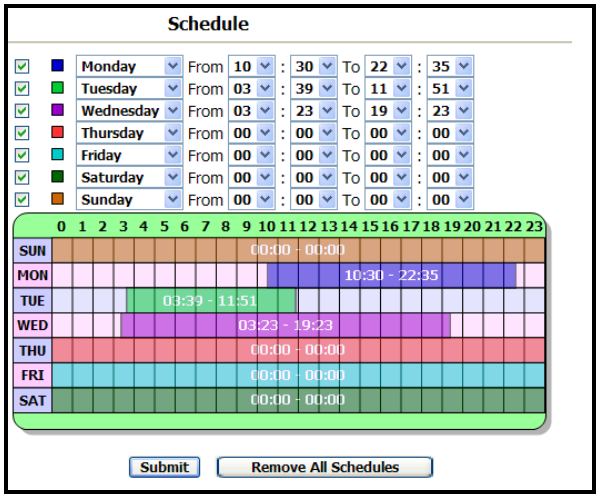
Simply type in your name, email and message then hit the post button to send the message on the guestbook.

IF you click on the you can see the log of the messages.



Schedule Record

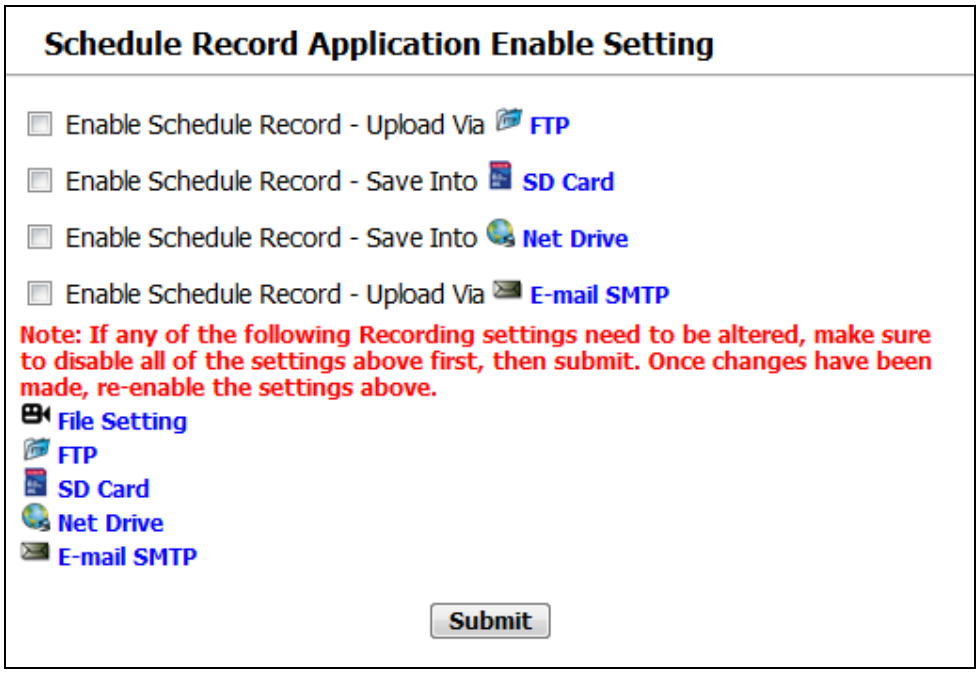
Schedule



The schedule allows you to select days and times that you would like to schedule automatic recording. You can pick a day from (Sunday – Saturday) and also a option for Everyday.
To schedule automatic recording:

1.) Select the day that you would want to start recording.
2.) Select the **From time** and the **To time**.
3.) Once the schedule has been created hit the submit button to apply the new settings.

Schedule Recording

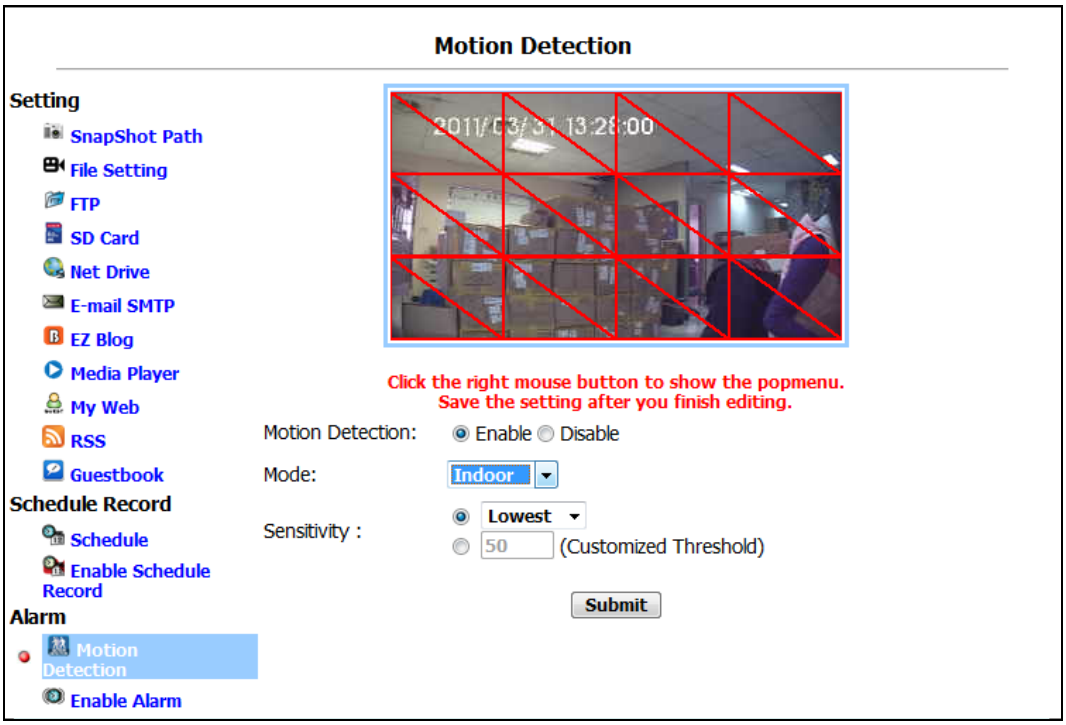

Schedule Record Application Enable Setting
Enable Schedule Record - Upload Via FTP
Enable Schedule Record - Save Into SD Card
Enable Schedule Record - Save Into Net Drive
Enable Schedule Record - Upload Via E-mail SMTP
Note: If any of the following Recording settings need to be altered, make sure to disable all of the settings above first, then submit. Once changes have been made, re-enable the settings above.
File Setting
FTP
SD Card
Net Drive
E-mail SMTP
Submit

Schedule Record allows you to select where the schedule will record the video files to.

Schedule Record – Upload Via FTP: Saves schedule recordings into FTP
Schedule Record – Save into SD Card: Saves schedule recordings into SD Card
Schedule Record – Upload via E-mail SMTP: schedule recordings into e-mail

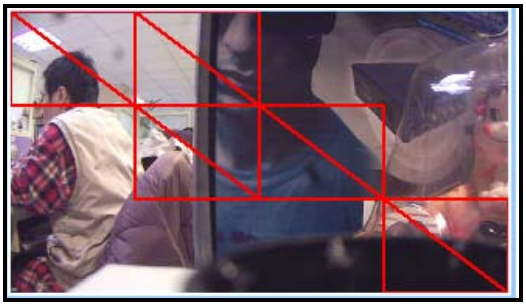
Alarm

Motion Detection



To enable motion detection:

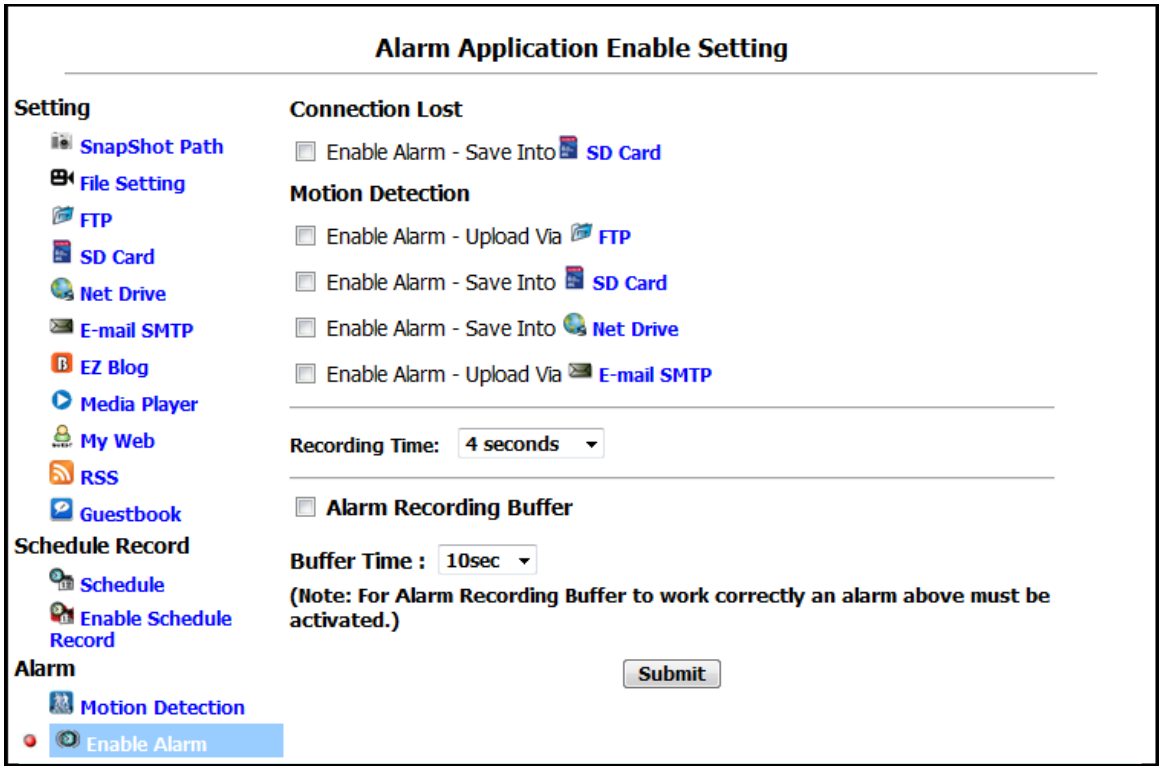
1.) Select Enable in the motion detection option.
2.) The Mode: Can be set for indoors or outdoors. Indoors will have a more sensitive motion detection setting while outdoor will be less sensitive.
3.) Select the sensitivity of your choice
    a. You can pick from Lowest, Low, Medium, High, Highest
    b. You can also customize your own threshold from (1-99)



4.) Once you have set your settings on the window screen click on the picture where you want the motion to be detected. Double click on the selected areas to remove the choice.

5.) You can right click on the window screen for more options
6.) Once your settings have been set hit the submit button to save all changes.

Enable Alarm



Enable Alarm – Lost Ethernet Connection: Save into SD Card:
When Ethernet connection is lost the device will automatically save into the SD card. Saving a backup.

Enable Alarm - Upload FTP
When motion is detected, the IP Kamera 9070IR will upload files to the selected FTP server.

Enable Alarm - Save Into SD Card
When motion is detected, the IP Kamera 9070IR will upload files to the SD card.

Enable Alarm – Save Net Drive
When motion is detected, the IP Kamera 9070IR-PoE will upload files onto the Network Drive

Enable Alarm – Save SMTP

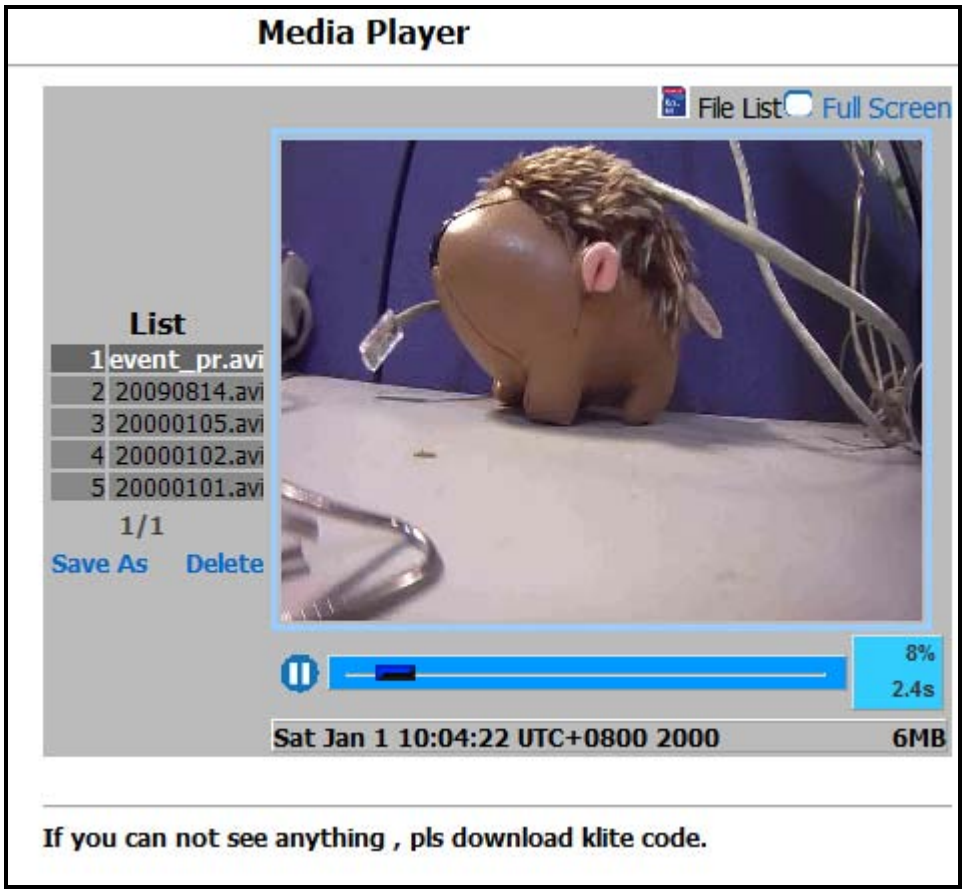
When motion is detected, the IP Kamera 9070IR will send files to E-mail.

Recording Time: Set the duration of time you would like the IP Kamera 9070IR to record when alarm is set off.

Enable Alarm Recording Buffer: The alarm recording buffer allows the camera to the selected amount of buffer time before an alarm has been detected. This allows the IP Kamera 9070IR to start recording before and after motion has been detected.

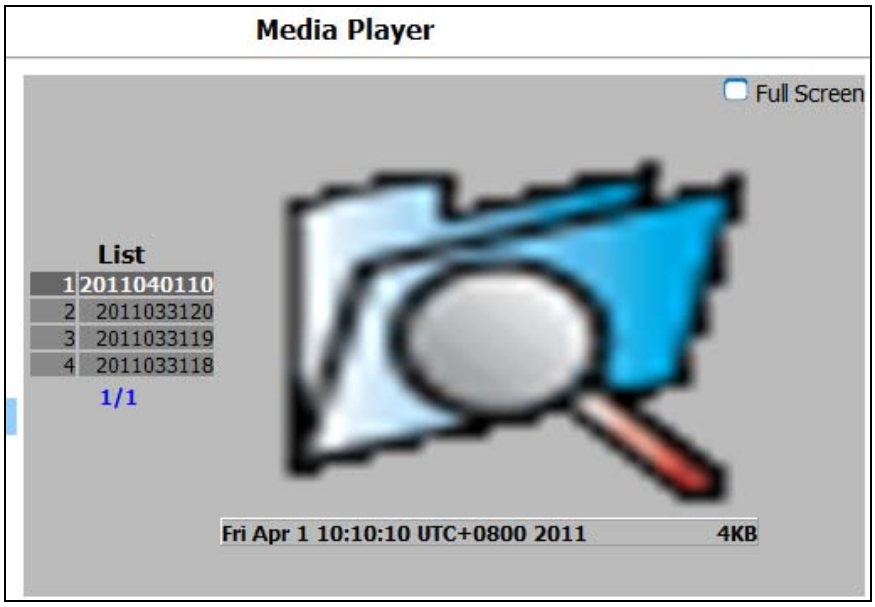
You can select the amount of buffer time you would like the 9070IR-PoE to save for these pre-recorded videos.

Media Player

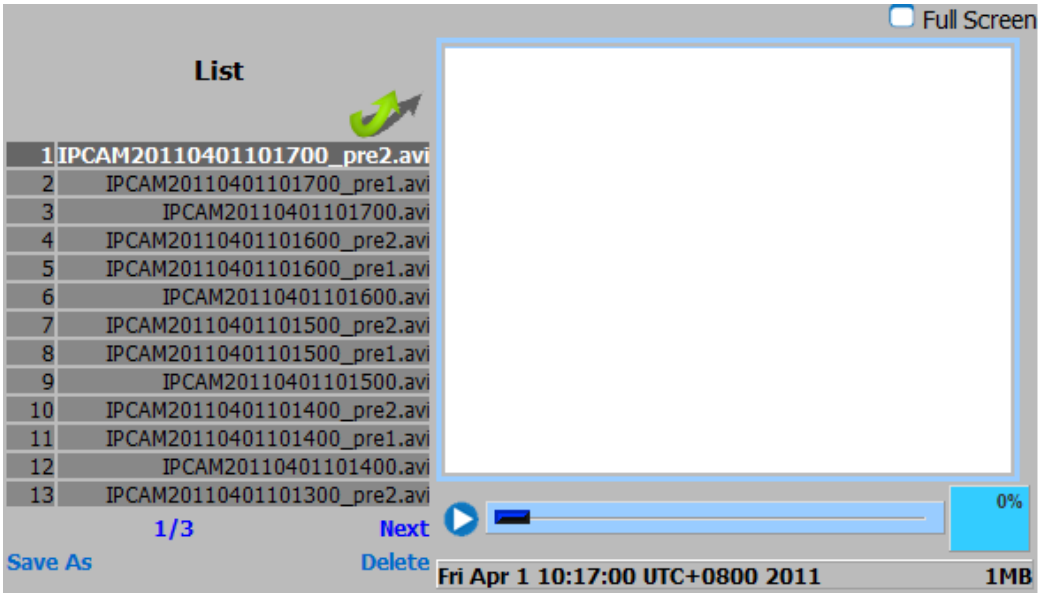


The media player is a convenient way to see what has been recorded into your SD card. From here you can view pictures or videos that you have recorded.

The media player will separate the recordings into different folders where the files will be stored.



In these file folders you will see that your files are labeled by Year/Month/Day/Time.
Also you may see some files that have a pre at the end of the file name. This is from the prerecording technology which allows you to record a specific amount of time before and after motion detection has been activated.



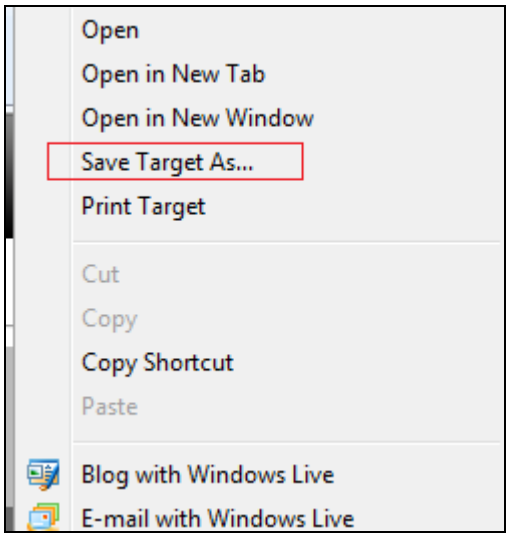
To Play Media Player Files:

Simply click on the file that you would like to view and hit the play button.

While watching the video you can zoom in by clicking on your left click of the mouse and zooming out by clicking on the right click.

To save the files:

1.) Select the file that you would like to save, then right click on the save as button and select, save target as.



2.) Then select where you would like the file to be stored.

View in Full Screen:

To view the IP Kamera in full screen model you will need to press the Full Screen mode.

Logout

When you are done use the IP Kamera 9070IR the logout function allows you to easily logout of your device. This ensures that anyone who uses the device after you will need to re-login to the IP Kamera.

Simply just click on the logout button on the bottom corner.

7.) Controlling the Device

CGI HTTP Commands

Http commands are command lines that execute commands to the device from a web browser, software, or code. The basic commands are provided below.

There are two ways to input http commands with authorization required
Password in http:
http://login:password@ipaddress:port/command

Password not in http:
http://ipaddress:port/command

Note: If using password not in http: command the browser asks for the login and password.

Snapshot Command:

The snapshot command takes a snapshot of the camera in the current view.

http://ipaddress:port/snapshot.cgi

Ex. http command:
http://192.168.100.50:85/snapshot.cgi

Change Name:

This command changes the name of the IP Kamera 9070IR

http://ipaddress:port/vb.htm?cameratitle=**name**

Ex. http command:
http://192.168.1.192/vb.htm?cameratitle=test_9070IR11

Change IP Address:

This command changes the IP Address of the IP Kamera 9070IR

http://ipaddress:port/vb.htm?internetip=**ipaddress**

Ex. http command:
http://192.168.1.192/vb.htm?internetip=192.168.1.191

Change Port:

This command changes the Port of the IP Kamera 9070IR

http://ipaddress:port/vb.htm?httpport=**portnumber**

Ex. http command:
http://192.168.1.192/vb.htm?httpport=1025

Change Subnet Mask:

This command changes the Subnet Mask of the IP Kamera 9070IR

http://ipaddress:port/vb.htm?subnetmask=**subnetmask**

Ex. http command
http://192.168.1.192/vb.htm?subnetmask=255.255.0.0

Note: Default subnet mask is 255.255.0.0

Change Gateway:

This command changes the gateway the IP Kamera 9070IR.

http://ipaddress:port/vb.htm?gateway=gatewayaddress

Ex. http command
http://192.168.1.192/vb.htm?gateway=192.168.1.1

Change DNS:

This command changes the gateway the IP Kamera 9070IR.

http://ipaddress:port/vb.htm?dnsip=dnsipaddress

Ex. http command
http://192.168.1.192/vb.htm?dnsip=168.95.1.1

MJPEG Streaming

This command integrates streaming data into a software, website, or any other application.

http://ipaddress:port/ipcam/mjpeg.cgi

Ex. http command
http://192.168.1.192/ipcam/mjpeg.cgi

8.) Using RTSP with VLC

Before Setting up VLC: Make sure that the 9070IR-PoEis set to be the DMZ host on the router that you are using, please refer to the routers manual on how to accomplish this.

How to setup VLC media player & Open a network stream

Real Time Streaming Protocol (RTSP) gives the device another way to stream live video. Using programs that support RTSP, you can broadcast the videos from the 9070 live.

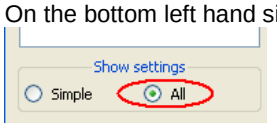
Note: To access the device from outside the network. Please make sure of the following:

9070 should be set to DMZ host,

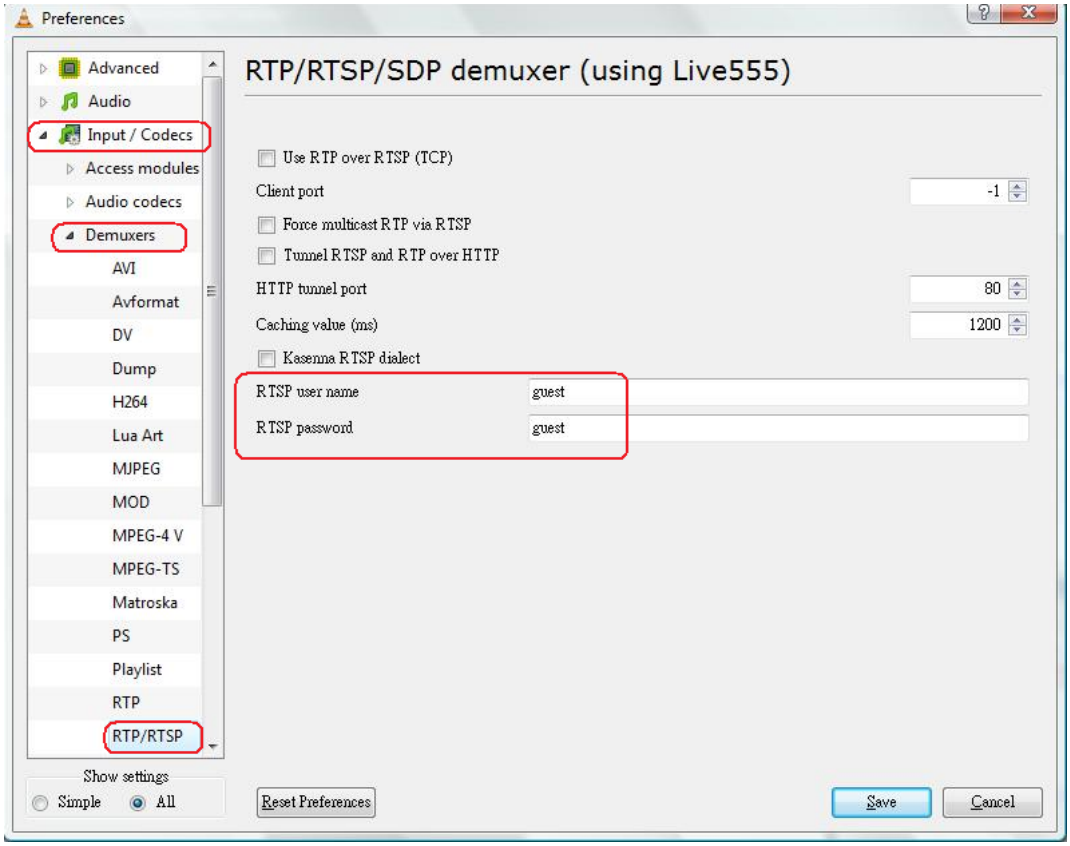
or mapping router's TCP ports 554 and 8554 to 9070, preferably at the same time mapping UDP port 6970-9999

1.) Open VLC media Player
2.) Click on Tools > Preference
3.) On the bottom of the screen click the Reset preference button.

4.) On the bottom left hand side of VLC select the all under the show settings area.



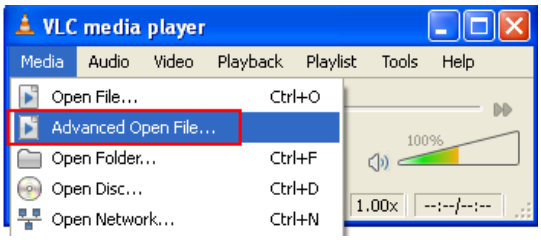
5.) Then in the left panel select Input / Codecs > Demuxers > RTP/RTSPl and type in the **RTSP user name** and **RTSP password.**



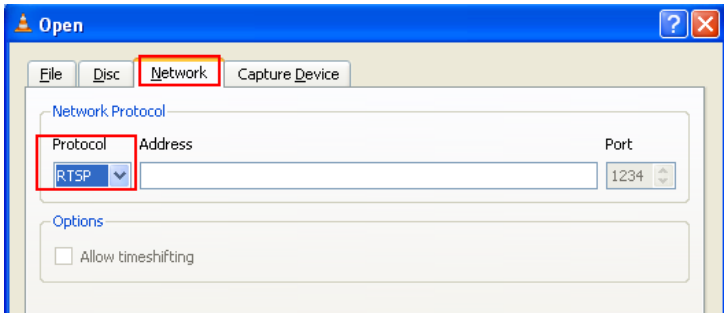
6.) Check the Cache value. *For low latency, it should be 70~80 based on PC's performance.*
Note: If the video is not smooth, set the caching value from 150~1200. This problem could be due to too much congestion, busy pc, and etc.

7.) Save the new settings

8.) Then go back to the VLC media player and go to Media > Advance Open File

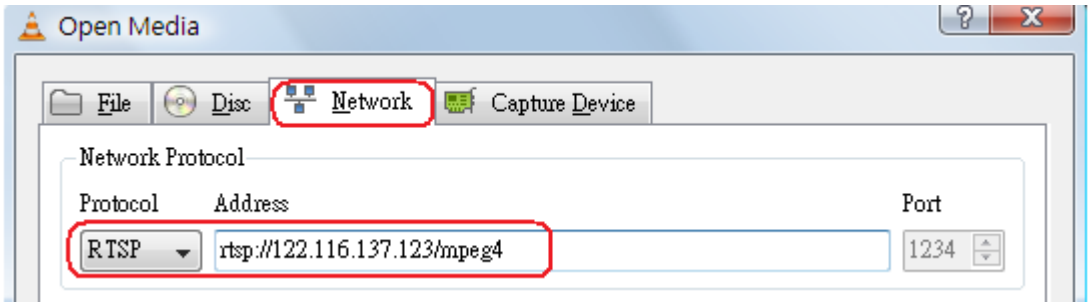


9.) Next select the network tab and under the protocol select RTSP.

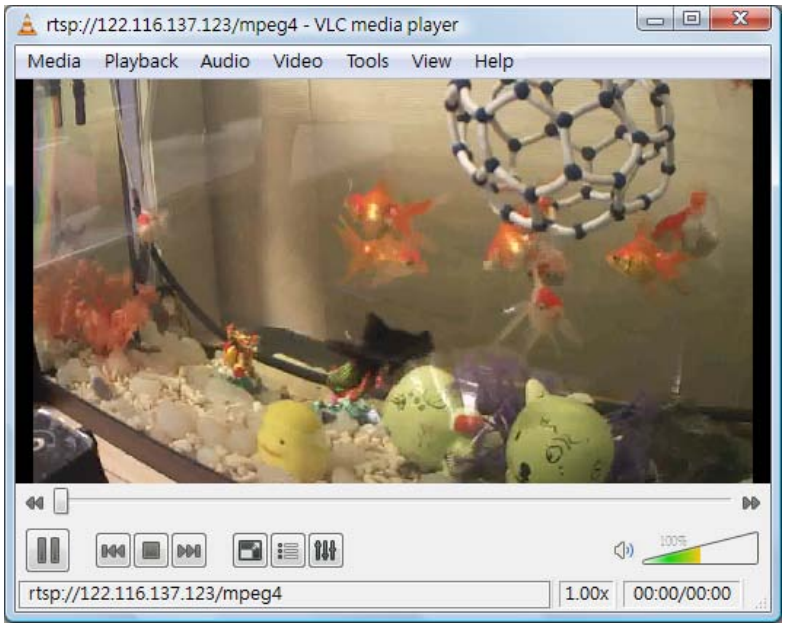


10.) Type in the RTSP address of your device
For Mpeg4 Stream1 : rtsp://<IP Address>/mpeg4
For Mpeg4 Stream2 : rtsp://<IP Address>:8554/mpeg4

Example: rtsp://122.116.137.123/mpeg4



11.) Hit the play button and wait a few seconds for the program to start streaming.



9.) Additional Software

Surf 16CH

CNT makes connecting to the IP Kamera 9070IR a very simple task. Surf 16 CH a multi-device DVR monitoring software easily allows the user view the 9070IR.
Follow these simple steps:

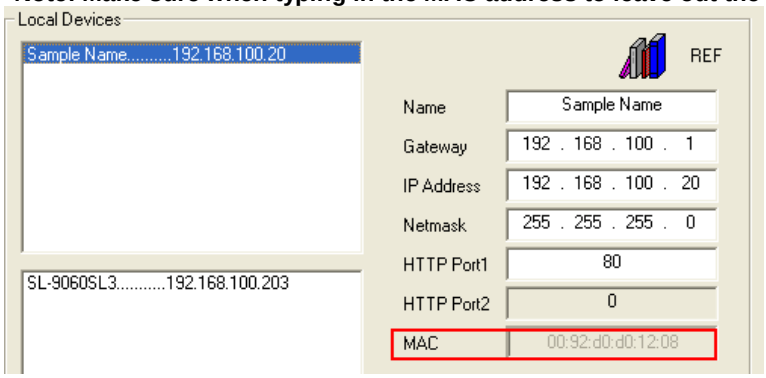
MAC Address

There are two ways to find the MAC address in IP Edit .
***Note: IP Server must be enabled on the device's webpage. By default IP Server is enabled.**

Find MAC Address in LAN Using IP Edit

1.) In IP Edit , highlight the device that is being used. On the right side of IP Edit the MAC Address for CNT will be listed.

***Note: Make sure when typing in the MAC address to leave out the ":"**

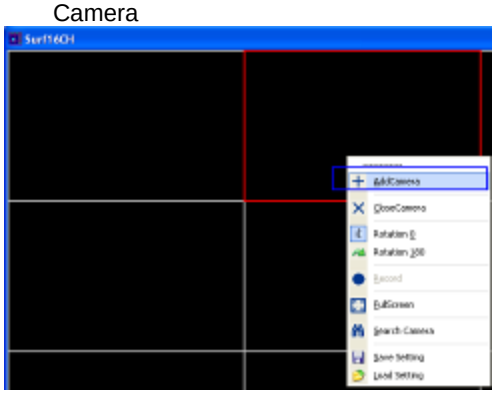


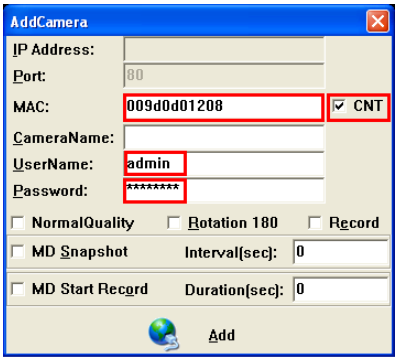
Find MAC Address in WAN Using IPService on IP Edit

1.) Find the MAC Address through the internet, Open IP Edit and hit the connect button on IP Service.
2.) Then Type in the name of the device, in this case it is "Sample Name", then hit the search button.
3.) Device will be listed and the MAC address should be displayed on the screen. Copy down the MAC address and use it to connect via CNT.

Add device using CNT

1.) On Surf 16 Ch DVR software, right click on the screen on one of the windows and select Add Camera





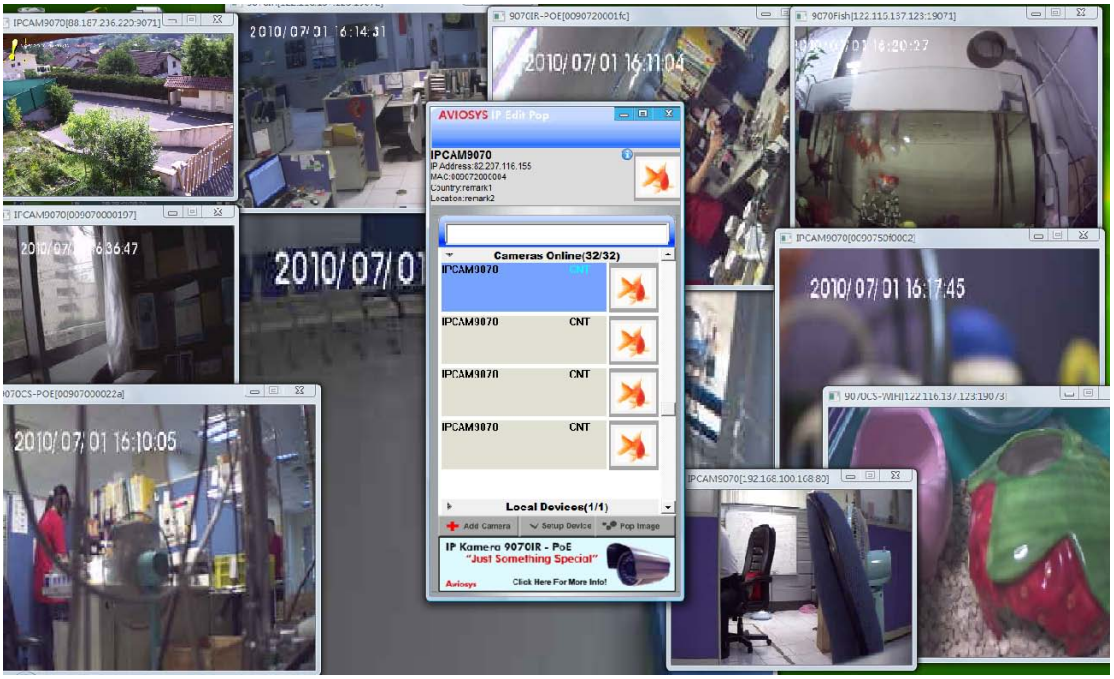
2.) Then under the section labeled **MAC:** Type in the MAC address.

3.) Do not forget to enter the password and login.

Surf Pop

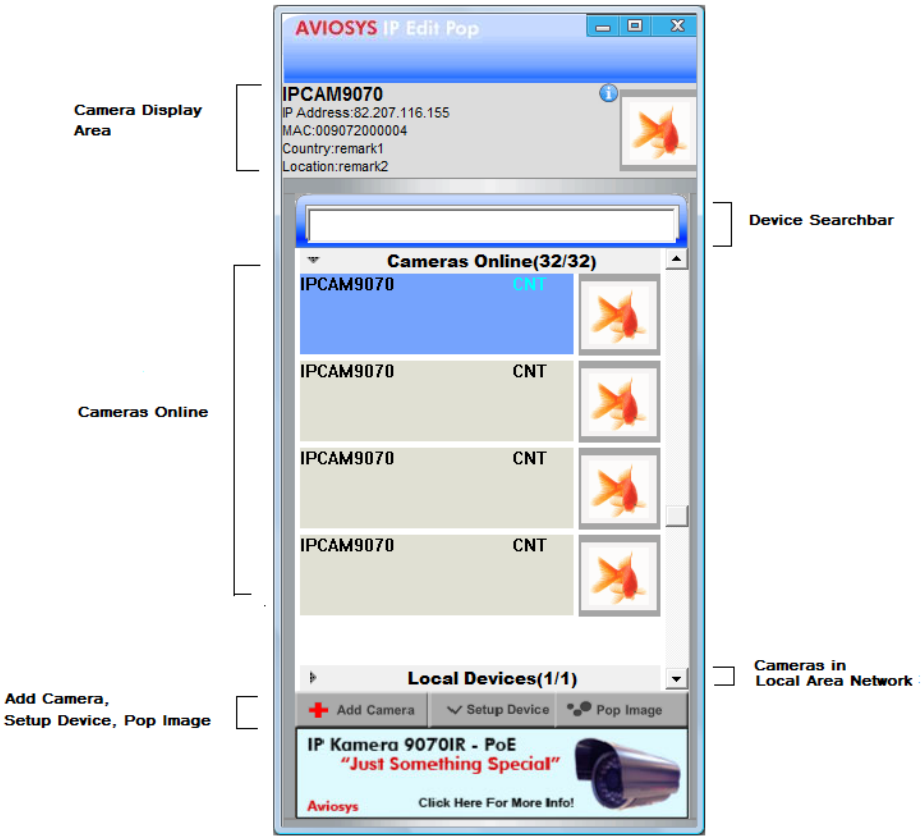
Surf Pop is a new and innovative way for multi camera monitoring and sharing. Instead of the traditional way of monitoring surveillance, Surf Pop brings a convenient and fun way to view all your cameras through the internet or within the local area network. Now you can share your IP Kamera with your friends, clients, relatives, and to anyone who is interested in seeing your IP camera. You can also use Surf Pop to monitor your IP Kamera's from all over the world as a multi camera monitoring system.

With this software you can easily connect to your device using CNT technology from Aviosys. CNT or "Cross Network Technology" allows users who may not be as tech savvy as others to easily view his / her IP Kamera without having to port forward the device through the firewall. This can save one so much time and efforts in setting up the device and allow the user to experience the camera instead of



Surf Pop Interface

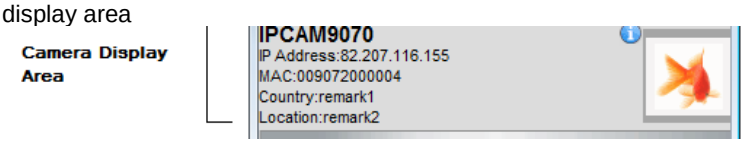
The Surf Pop Interface is a very easy to use and familiar in format. Very similar to many chat programs like AIM or Skype, Surf Pop allows you to easily manage your IP Kamera's.



The Surf Pop interface consists four major parts which consists of the following:
Camera Display Area: The Camera display section will display information on the current camera that is chosen.
Device Search bar: The device search bar is a quick and easy way to find your cameras simply by typing in the device name of the device you are looking for.
Cameras Online: Cameras online are the cameras that the user has added from outside the network.
Local Devices (Cameras in the local Area network): Local devices are the cameras that are detected within the Local Area Network.

Camera Display Area

The camera display area will show important information regarding the device that you are viewing.
Once you have clicked on a camera in your list the corresponding information will be shown in the camera display area



In this area you will find information on the camera including
- **IP Address:** The IP Address will show the actual IP of the device.
- **Mac Address:** The mac address is a unique identifier for the device.
- **Country:** If a country has been set it will show up here
- **Location:** If the location has been set on the IP Kamera it will show up here.

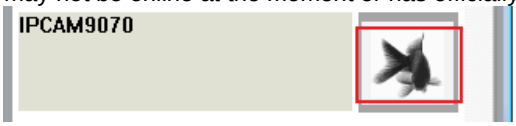
To fill in the information correctly, you will need to click on the setup device button and populate the information in Surf Pop.

Camera Online / Offline

Surf pop was designed so that you can constantly monitor the status of your IP Kameras and view them.
From Surf Pop main window you can see whether your devices are connected.

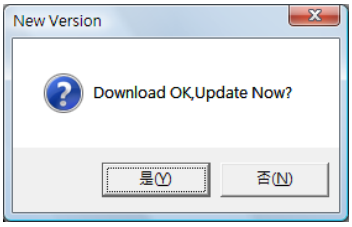
Connected: When the device icon has color that means that the device is connected.

Disconnected: In the case that the icon picture is black and white, this means at the moment the device may not be online at the moment or has officially be disconnected.



Update Icon

The update icon will appear when there is a new update available for surf pop.
Simply just click on the button and surf pop will ask if you would like to update the device.

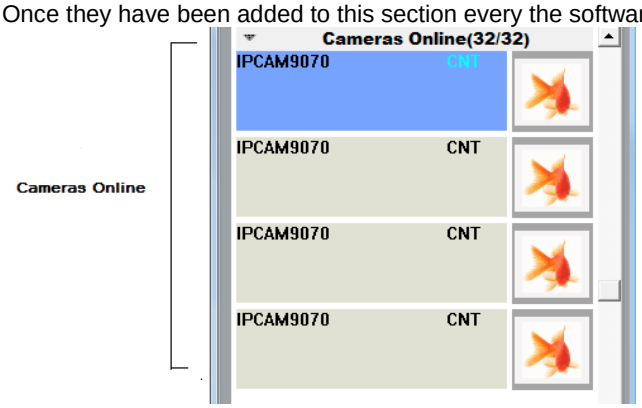


Once the update has been confirmed Surf Pop will automatically update the program itself

How to setup Surf Pop

Cameras Online

The camera online section allows you to see the cameras that you have added from outside the network. Once they have been added to this section every the software is open the devices will stay in this area.

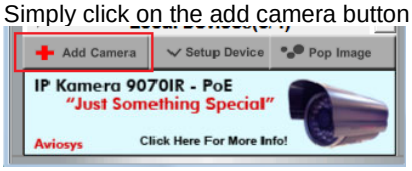


Cameras online is basically all the cameras that you added that is outside the network. Any camera that was added using the IP Service feature

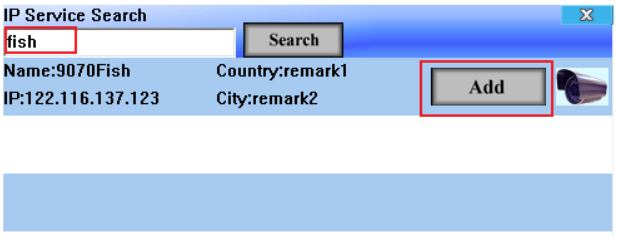
Adding a device

Adding a camera to Surf Pop is fairly easy. Basically once your device is setup and connected to the web you can search for your device through the IP Service feature that is built into the add device button.

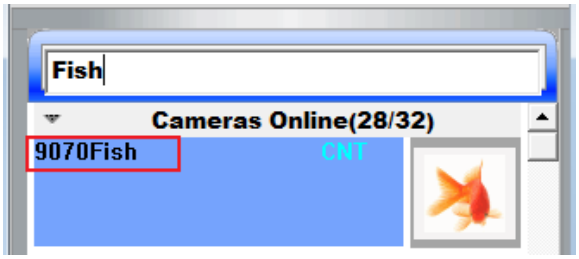
1.) Simply click on the add camera button on the bottom of the device



2.) In the search field on the top left type in the device name that you have selected and then click the add button to add the device to your list.



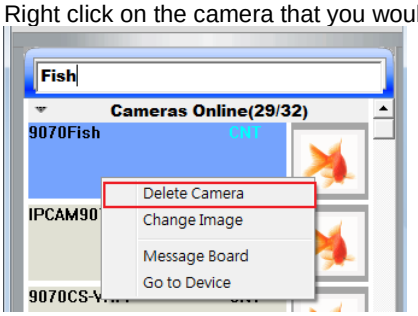
3.) Then once the device has been added you can find it in the online cameras section.



Removing a device

To remove a device from Surf Pop all you need to do is go to the online cameras section and find the device that you would like to remove. Then do the following:

1.) Right click on the camera that you would like to remove and right click.



2.) Then select the option that says delete camera.

Local Devices

The local device section is where you will find devices that are located in your Local Area Network or (LAN). These devices will show up automatically when a device has been detected. Once detected you can connect to the device or setup the device from this section.

Setting up a device

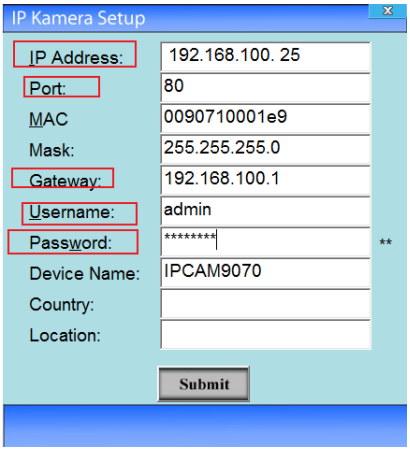
Surf pop was designed to create a quick user experience with the software. Any 9070IR-PoE IP Kamera's that is on manufacturer default will be able to automatically be detected by surf pop and can easily be seen without any setup. Simply just press and play.

But for people who have special network requirements or need to setup their device, you will need to do the following:

1.) Select the device that you would like to setup and click on the setup device button.

2.) Then type in all the appropriate information including IP Address, Port, Username, Password, Country and Location and hit submit

Note: *This can only be done with Administrator rights. So if you are login in with a guest account no changes can be made*



3.) Then to see if the device was correctly setup, simply double click on the device in surf pop and a pop window will appear.

Using Surf Pop

After you have finished setting up the surf pop it is time to use surf pop. Simply just click on click on the devices that you would like to pop out and surf pop will do the rest.

How to Pop?

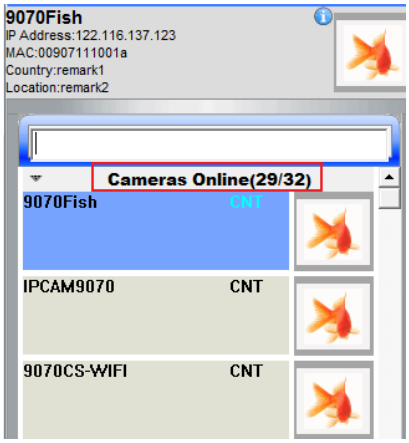
Once you have setup the devices and added the cameras that you would like to connect to. You can start Surf Popping your IP Kameras. Simply just double click on the IP Kamera in the Surf Pop camera list or click once and then click on the Pop Image button.

For example:

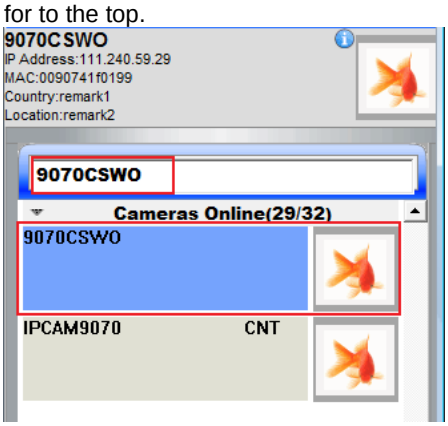
Device Search bar

The search bar allows the user to easily search for devices that on in Surf Pop's list. Simply just type a name for your device and any device with the same name or close will be filtered out.

For example: If I wanted to search in my list for a camera named 9070IR. In the picture below you can see that there are a total of 32 cameras 29 that is connected.



Now it would be hard to scroll down the list finding the name of the camera you are looking for so simply use the device search bar and type in the name 9070IR and Surf Pop will bring the camera that you are looking for to the top.

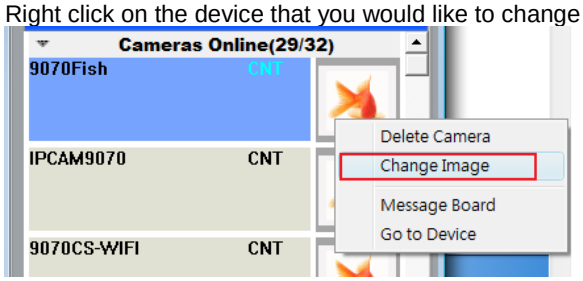


Changing the Icon Picture

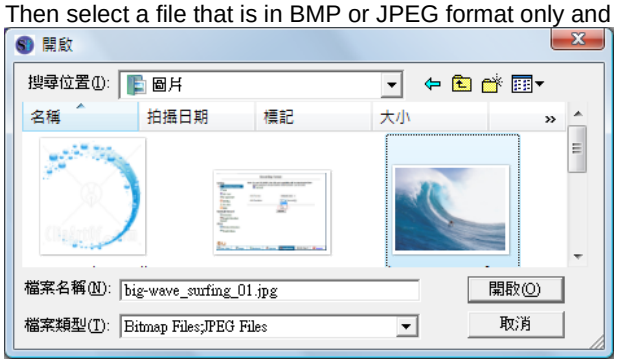
Changing the Icon picture allows you to customize each camera to have it's own different icon. This way you can easily recognize the device that you have selected

To change the Icon on the device:

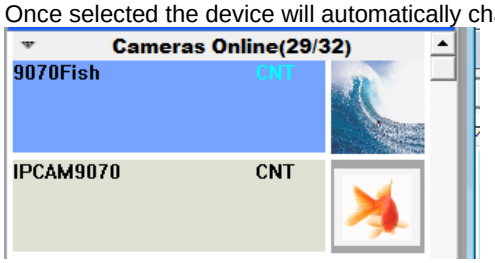
1.) Right click on the device that you would like to change the icon image for.



2.) Then select a file that is in BMP or JPEG format only and less that 2MB then click okay



3.) Once selected the device will automatically change the icon image to the one you have selected.



Zooming into the image

With surf pop you can also easily zoom into the pop windows that you are looking at. Simply just click on the image with the left & right mouse and the device will use the digital zoom feature to zoom in and zoom out.

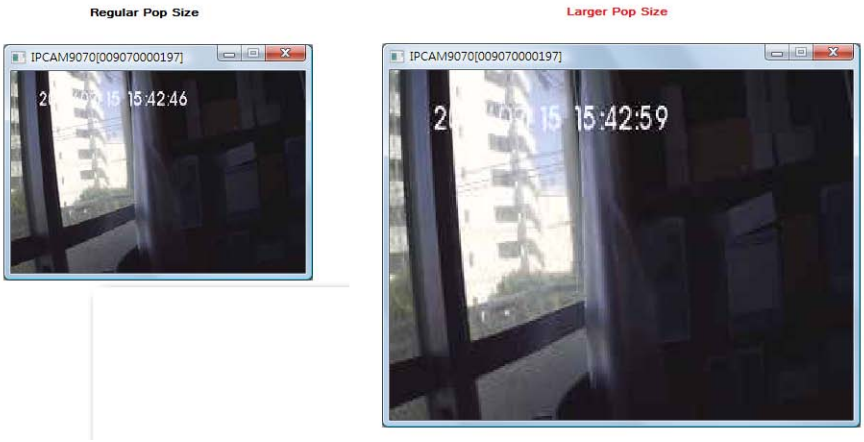
Left Click: Will zoom into the picture
Right Click: Will zoom out of the picture
Left Double Click: Will zoom to the largest possible zoom
Right Double Click: Will zoom to the smallest possible zoom.

See below how zoom might be used:

Enlarging Pop Windows

With Pop surf the user can enlarge the screen of the video stream. Basically all you need to do is to put the mouse cursor on the bottom or edge of the video screen then left click and drag. This will enlarge the view of the video that you are viewing.

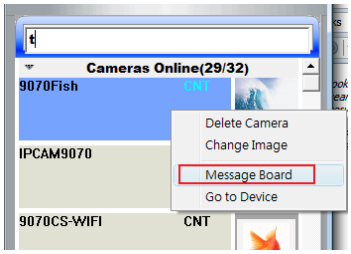
Please see the picture below for more details:



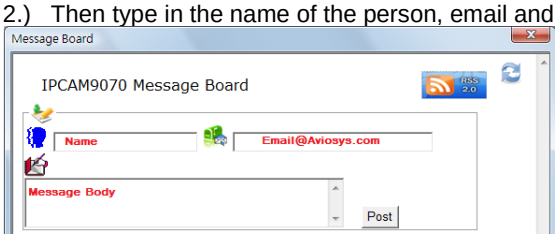
Message board

The message board section allows users to interact with other users easily on surf pop. Now you can share your information or have people interact with your camera as well.

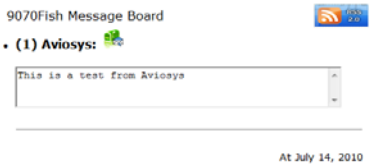
To leave a message on a message board of the device:
1.) Right click on the device and select message board.



2.) Then type in the name of the person, email and the message.



3.) Once a message has been set it will look like the picture below.



Go to Device

So if for some reason, you need to connect to the device directly to modify some of the settings on your IP Kamera. You can use the **go to device** button to directly open a internet browser and go to the camera.

To do this follow the following instructions:.

1.) Right click on the device that you would like to connect to and select go to device.

2.) Then enter the correct login and password into the internet browser to connect to the device.

10.) Frequently Asked Questions (F.A.Q)

Q1: Why can't I view the video files that I have recorded, nothing is playing?

Ans: VLC Codec, download VLC Codec from their website at: **http://www.videolan.org/**

Q2: How do I reset the device to manufacturers default values?

Ans: On the back of the device there is a reset button, hold down the reset button for more than 7 seconds. Then give the 9070IR-PoE a 1 minute to restart. Once the device has restarted it will be set back to manufacturer default settings.

Default Values
Default IP: 192.168.1.168 (When 9070IR-PoE is connected to PC directly)
Default Login: Admin
Default Password: 12345678

Q3: Why does the device on EPTZ change my video mode?

Ans: When EPTZ is activated Video Codec mode will be switched to MPEG4 & M-Jpeg when disabled the codec will be set on Mpeg1, Mpeg2, & M-Jpeg.

Q4: How do I take snapshots using the EPTZ function?
Ans: When using EPTZ function remember that only the snapshot functions works with the EPTZ controller. When using the mouse to Pan Tilt and Zoom into the picture the snapshot button will not capture the screen correctly. A way to take a picture of the screen using the EPTZ with the mouse is to click on the print screen button on the computer being used.

Q5: Why is the RTSP not connecting to my VLC player or Quick time Player?
Ans: To use the RTSP functionality it is necessary to first set your 9070-Lite to be the DMZ host in your network. Also be sure to port forward your device at the following ports.

Port 554 for 1280 x 720P
Port 8554 for CIF format

Please refer to the routers manual on how this is setup

Q6: How do I improve the image quality on this device?
Ans: The Image quality of the 9070 is dependent on the bit rate of the device. With a larger bit rate the device will naturally create higher quality image, but this will affect the smoothness of the streaming when accessed through the internet. To find the most optimal settings for image quality and streaming smoothness, try different bit rate settings to achieve the best fit settings.

11.) Customer Feedback

Your Feedback is definitely important for us to continue providing the great quality products and service that Aviosys has to offer. We definitely would like to know what you think about our products and how we can we can make your Aviosys experience even better.

Please email us at our service department at Service@Aviosys.com or visit customer feedback form at:

http://spreadsheets.google.com/viewform?hl=en&formkey=dGowalg3UndrdTJHNUIxdlljQXI3Q2c6MA..#gid=0

We are happy to serve you to the best of our ability and to provide an ongoing positive experience with Aviosys. Thank you for your support.